CONSTRUCTION NEWS

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

(* *denotes that this work is advertised in Engineering News.*)

The following Plans (P.) and Specifications (S.) are on file and may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York.

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RAILWAYS.

(* *denotes that this work is advertised in Engineering News.*)

AMERICAN MIDLAND.—The statement made last week that Lamar Lyndon, Consult. Engr., 2 Rector St., New York, is chief engineer for the American Midland Ry. is erroneous. Mr. Lyndon advises us that "the error arose from my having at one time acted in an advisory capacity to the Midland Construction Co. concerning an electric railway which they then contemplated building. This company was also under contract to build the American Midland Railway, but this being strictly civil engineering work and therefore quite out of my line of practice, was not referred to me, and I have no connection with the engineering of this railway." The president of the American Midland Ry. Co. is stated to be in Europe where he will remain until the early fall. Until his return construction work will not be commenced.

BALLINGER & ABILENE.—Grading contract has been let to HUBBARD & LYONS, Ballinger, Tex., and work will be commenced at once. The principal freight traffic will be cotton and cattle. C. A. Doose is Pres.; John T. Guion, First Vice-Pres.; C. A. Harris, General Attorney; J. Wilmeth, Treas., and W. J. McDaniel, Ch. Engr., all of Ballinger, Tex. Noted on Feb. 20.

BRISTOL & KINGSPORT.—John I. Cox, Pres., Bristol, Tenn., states that surveys for this proposed railway from Bristol, Tenn., to Kingsport, Va., 25 miles, have been completed. Estimates are not yet ready. No date has been set for letting contracts. Of the total distance 23 miles are in Tennessee and two miles are in Virginia. The other officers of the company are: F. H. Cothran, Ch. Engr.; S. L. King, Vice-Pres., Bristol, Tenn., and F. Powell, Secy. and Treas., and J. B. Cox, General Counsel, Johnson City, Tenn. Noted on Feb. 20.

BUFFALO, ROCHESTER & EASTERN.—Gilbert Hodges, Ch. Engr., 218 Cutler Bldg., Rochester, N. Y., on Feb. 27 testified before the Public Service Commission (for the Second District) that the cost of the road, including roadbed and equipment, would be $85,000,000. He said the road was to be double tracked throughout, with 100-ft. right-of-way, and stations at Buffalo, Rochester, Utica, Oneida and Troy, which would cost $40,000 each. It is proposed, he said, to spend $1,500,000 for terminals at Buffalo and Troy. Other experts were called and data submitted, all tending to show the proposed road was commercially and financially feasible and that it would not interfere with the vested rights of the New York Central & Hudson River R. R. Co. The company has made application, as noted on Dec. 19, for authority to construct a through double track road from Buffalo to Troy. The hearing was adjourned until March 17. Noted on Nov. 14 and Oct. 17.

BURRARD & WESTMINSTER BOUNDARY RY. & NAVIGATION CO.—This company has been organized, it is announced, to construct the following lines: Vancouver, B. C., to Fraser River bridge, New Westminster, B. C., thence via Port Moody to the proposed Vancouver, Westminster & Yukon Ry. bridge at Second Narrows, Burrard Inlet, and thence to the place of commencement in Vancouver. From the proposed Vancouver, Westminster & Yukon bridge to north arm of Burrard Inlet and to Howe Sound. From Fraser River bridge to the international boundary line between Semiamoo Bay and Sumas. From False Creek, Vancouver, to Point Grey; thence to the Fraser River bridge. From Port Moody to Stave River and the east boundary of Mission Municipality. Tupper & Griffin, Vancouver, B. C., are the company's solicitors.

CANADA.—John E. Hamilton, U. S. Consul at Cornwall, Ont., has compiled the following summary of the statistics of Canadian railroads for 1907: Miles in operation, 22,452; double track road (miles), 1,076; total capital invested, $1,171,837,808; total net earnings, 1907, $42,989,537; increase in freight traffic (tons), 5,889,420; increase in passenger traffic, 4,147,537; increase in locomotives, 573; increase in freight cars, 17,649; increase in passenger cars, 323; persons killed in 1907, 587; persons injured in 1907, 1,698.

CANADIAN PACIFIC.—The following lines in western Canada will be constructed this summer. Saskatoon, Sask., to Hardisty, Alta., in conjunction with the Wetaskiwin branch, 326 miles; Moose Jaw, Sask., northerly, 108 miles; Wolsely, Sask., to Reston, Man., extension 24 miles; Teulon, Man., northerly, 26 miles; Bredenbury-Esterhazy, Sask., 20 miles; Weyburn-Stoughton, Sask., 37 miles; Lethbridge-McLeod, Alta., change of line, 34 miles; Sheho-Lanigan, Sask., 83 miles, making a total of 642 miles. William Whyte is Second Vice-Pres., Winnipeg, Man.

Official announcement has been made that work on the Esquimalt & Nanaimo branch is the only construction to be done in British Columbia this year. Noted on Jan. 30.

CHARLESTON, PARKERSBURG & WESTERN.—This railroad will extend from Charleston, W. Va., via Sissonsville and Spencer, to Palestine, W. Va., where it will connect with the Little Kanawha Railroad, which is operating from that point to Parkersburg, W. Va., 30 miles. Total length, 60 miles. It is not proposed to do any construction in near future. A. S. Alexander is Pres. and C. P. Peyton is Ch. Engr., Charleston.

CHICAGO, BURLINGTON & QUINCY.—T. E. Calvert, Ch. Engr., Chicago, announces that there is no truth in the report that this company proposes to build west from O'Neil or Kearney, Neb., and that no plans are made for any construction work in the near future. Noted last week.

DENVER & GULF.—Approximately 200 miles of surveys for this proposed railway from La Junta, Colo., to Canadian, Tex. (275 miles) have been completed and all surveys and estimates probably will be completed within the next six months. No actual construction is planned for 1908, but it may be decided later to undertake the work if financial conditions improve. W. R. Evans is Vice-Pres. and James Hicks is Ch. Engr., Texhoma, Okla. Noted on Jan. 16.

GRAND TRUNK PACIFIC. — FOLEY, STEWART & WELCH, contractors for 120 miles of the line from Edmonton, Alta., west, have sublet three 30-mile sections to J. McALLISTER, M. McKENZIE and B. BAKER. The remaining 30 miles is to be sublet in one and two-mile sections. Noted on Jan. 16.

GREENVILLE & KNOXVILLE.—Grading has been completed from Greenville to Riverview, S. C., 22 miles, and is in progress from Riverview to River Falls, S. C., four miles. Maximum grades will be 1½% and 56 and 60-lb. rails will be used. W. H. Patterson is Pres., Atlanta, Ga.; E. B. Patterson, Supt., Greenville, S. C.

HARRISBURG & OHIO RIVER.—H. S. Tipton, Ch. Engr., Harrisburg, Ill., states that surveys have been made from Gallatin, Ill., to the Ohio River and that grading has been completed from Gallatin to Harrisburg, Ill., eleven miles. It is the purpose of the company to build a link to provide a shorter route for several existing lines from St. Louis to Nashville, Tenn., by constructing a line from Mt. Vernon, Ill., to Clarksville, Tenn. It will be necessary to build a bridge across the Ohio River south of Harrisburg. T. E. Bell is Pres., Hammond, Ind. Noted on Jan. 2.

INTERNATIONAL & GREAT NORTHERN.—On Feb. 20 the Railroad Commission of Texas issued an amendment of a previous order made by it requiring the International

& Great Northern to make general improvements. In the amendatory order the commission requires "ballasting with broken stone or heavy gravel using not less than 2,500 cu. yds. a mile on the average on all those portions of the main line between Palestine and Houston and between Spring and Fort Worth, and the ballasting with sand or light gravel of the Columbia branch between Houston and East Columbia and the Madisonville branch between Navasota and Madisonville. This ballasting is to be begun at once and to be completed within four years. Renewal of ties on the main line and branches of the road is ordered as follows: Between Palestine and Houston, from 500 to 600 ties a mile; between Houston and East Columbia, 800 to 900 ties a mile; between Spring and Fort Worth, 500 to 600 ties a mile; between Navasota and Madisonville, 600 to 700 ties a mile. These renewals are to begin at once, and are to be completed within six months, all ties that have been placed since Jan. 1 being credited to the total amounts. Replacing with steel weighing not less than 75 lbs. a yard all rail weighing less than 70 lbs. that is now on the track between Palestine and Houston and between Spring and Fort Worth is ordered to be completed within two years. The commission also orders the adoption of a schedule looking to the replacement of all wooden bridges and culverts on the entire line of the road with permanent structures of concrete, steel and iron during the period exceeding not over five years from Jan. 1, 1908, and the replacing of not less than one-fifth of the total amount of wooden bridges and culverts during each year. Construction of a passenger depot at Crockett is ordered, plans therefor to be filed in 60 days, and the structure to be completed within six months." An answer as to whether or not this order is to be obeyed is to be filed on or before April 1. The schedules of a number of passenger trains are ordered to be lengthened until the required improvements in roadway have been made. Noted on Nov. 28.

On application made in behalf of the Mercantile Trust Co., of New York, before Judge Edward R. Meek, of the Federal Court for the northern district of Texas, on Feb. 26, alleging default of the interest on a bond issue of 1892, T. J. Freeman, of New Orleans, was named receiver for the International & Great Northern Railroad. Surety will be executed and the receiver probably will qualify to take over the property at once. This company now operates 1,159 miles of railroad. Geo. J. Gould is Pres.

KANSAS CITY, MEXICO & ORIENT.—The State of Sinaloa, Mexico, has granted the Kansas City, Mexico & Orient Railroad a subsidy of $200,000 for building its line across the State. The State of Chihuahua granted a subsidy of $750,000 and the Mexican Government $6,100,000 for building this road. A. E. Stillwell, Pres., has asked the stockholders of the company to subscribe to notes or bonds. The funds thus obtained are to be used in completing the 67 miles of line between the Red River and Benjamin, Tex.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—It is officially announced that grading on the line from Brooten to Duluth, Minn., 187 miles, has been suspended indefinitely. Track was laid in 1907 from Brooten to the Mississippi River, 50 miles, and grading has been completed to Onamia, 89 miles from Brooten, leaving 137 miles of track to be laid and 98 miles of grading to be completed. FOLEY BROS. & LARSON, of St. Paul, are contractors for the grading and ROBERTS BROS., of Chicago, are contractors for the tracklaying. The road will pass through Melrose, New Munich, Albany, Royalton, Moose Lake and Superior. Thomas Greene is Ch. Engr., Minneapolis, Minn.

NEW ORLEANS SOUTHERN.—Articles of incorporation for the New Orleans Southern Ry. Co., a corporation which will build a railroad from New Orleans, La., to the mouth of the Mississippi River, have been filed in Louisiana. The charter states that it will construct a standard-gage road from a point on the Mississippi River opposite New Orleans, through the parishes of Jefferson and Plaquemine to a point near South West, Grand, South or Southeast Pass, at the mouth of the Mississippi River. The charter also provides for a branch from the main line to Grand Isle. It is provided in the charter that it may conduct its business in the States of Louisiana, Alabama, Texas, Mississippi and Arkansas. The capitalization is fixed at $1,000,000, and it is provided that the company may begin business when $10,000 is subscribed. Emmet R. Hicks, L. A. Brugier and Arthur Kennedy are the incorporators.

*PHILADELPHIA & READING.—Bids were received on Feb. 27 for construction of the work appurtenant to the abolishment of grade crossings on the P. G. & N. R. R. as follows: Contract No. 28, car cleaning yard, Huntingdon St.; Contract No. 30, coal pocket yard between Berks and Norris Sts. (east side). W. Hunter, Ch. Engr., Philadelphia. William Steele & Sons Co., 1600 Arch St., Philadelphia, submitted a bid of $239,900 for the work at Berks St. and Edward Fay & Son, 2666 Richmond st., Philadelphia, a bid of about $550,000 for the work at Huntingdon St. Each is the lowest for the work specified.

PORT SIMPSON & FORT CHURCHILL.—Application has been made to Parliament for incorporation by this company, with a capital of $100,000,000 to build a line from Port Simpson, B. C., northeast to Fort Churchill, on Hudson Bay. The incorporators include: W. H. C. Duvall, Surveyor General for Canada; J. Brandon, Victoria, B. C.; H. White, former Mayor of Seattle, Wash.; J. McLaughlin, Los Angeles, Cal.; W. H. Harding, New York; S. Shenstone; A. C. Latimer, Washington, D. C., etc.

PORTLAND, COLUMBUS & EASTERN.—This company will be incorporated soon. It is planned to begin grading about April 1. This line will be an extension of the Cincinnati, Bluffton & Chicago from Portland, Ind., to Columbus, Ohio, 124 miles, of which 24 miles are in Indiana and 100 are in Ohio. Two routes are being considered, one of them extending through Piqua and Springfield and the other through Sidney and Urbana. R. M. Fulweiler is Ch. Engr., Huntington, Ind. John C. Curtis is Gen., Mgr., Huntington.

SOUTHERN PACIFIC.—J. P. Lippincott, Engr.-in-Charge of the Owens River Construction works, which is to supply Los Angeles, Cal., with water, and Gen. Adna R. Chaffee, Pres. of the Board of Public Works of Los Angeles, have taken up the project with E. E. Calvin, Vice-Pres. and Gen. Mgr. of the Southern Pacific regarding the building of a railroad from Mojave, Cal., to Owens River, 140 miles, to transport material for building the viaduct. The city of Los Angeles voted $23,000,000 in bonds for the building of this water system, which included the transportation of material, or in other words, a railroad. Bids have already been advertised for the construction of this road, but after consultation with the legal department of the Southern Pacific it was agreed that bids will have to be advertised again, as there was a flaw in the former one. It is understood that the Southern Pacific will be one of the bidders and, as the company is the only one in a position to build such a road, it probably will obtain the contract. Previously noted.

ELECTRIC RAILWAYS.

YORK, PA.—We are officially advised that survey will begin in a few days for the York & Shrewsbury Electric Ry. It will connect these two cities and will be about 14 miles long. Right-of-way has not been secured yet. D. B. Goodling is Pres., Loganville, Pa.; J. H. Keller, Secy., Shrewsbury; S. M. Manifold, Ch. Engr., York. Noted fully on Feb. 13, under Shrewsbury, Pa.

SLATINGTON, PA.—We are officially informed that right-of-way has been secured by I. W. Cramp, Engr., 2118 North Fourth St., Harrisburg, and that surveys are made for the Franklin & Towamensing Elec. R. R. There will be one 3-span bridge. The line will be eleven miles long, extending to Lehighton. A. P. Berlin is Pres., Slatington.

MOUNT JOY, PA.—H. W. Crawford, Ch. Engr. of the Elizabethtown & Florin St. Ry. Co., Lancaster, Pa., advises us that right-of-way is being obtained now. Surveys have been made. Company may do its own construction work. W. W. Griest, Lancaster, Pa., is Pres. Messrs. Griest and Crawford are Pres. and Ch. Engr., respectively, of the Conestoga Traction Co., which leases and operates the Lancaster City St. Ry.; Lancaster & Lititz Ry.; Lancaster, Willow St., Lampeter & Strasburg Ry.; Lancaster & Millersville Ry.; Lancaster & Columbia Ry.; Columbia & Ironville Ry.; Columbia & Donegal Ry.; Lancaster, Mechanicsburg & New Holland Ry.; Lancaster, Petersburg & Manheim Ry.; Lancaster & Rocky Springs Ry.; Ephrata & Adamstown Ry.; Lancaster & Quarryville St. Ry.; Rohrerstown, Landisville & Mt. Joy Ry.; Lancaster & Eastern Ry.; and New Holland, Blue Ball & Terre Hill Ry. The stock of this company is owned by the Lancaster County Ry. & Lt. Co., Lancaster.

TAMAQUA, PA.—We are officially informed that on Feb. 27 service was inaugurated by J. G. White & Co., managers of the Eastern Pennsylvania Railways over the new extension of the properties between Tamaqua and Middleport. This completes the through 35-mile interurban connection between Pottsville and Mauch Chunk, one of the principal improvements planned when the Eastern Pennsylvania Railways Co. was organized. The older properties incorporated in this new interurban route are the Tamaqua, and the Pottsville Union Traction Co.'s line between Pottsville and Middleport. At present the service is hourly with three of the new cars in operation. The extension parallels the tracks of the Philadelphia & Reading Railroad, is single track and well constructed with 70-lb. rails and cinder ballast. Long sidings are provided at intervals of two miles. Power is furnished from the Palo Alto station of the Pottsville Union Traction Co., which has been enlarged for the purpose to a capacity of 3,000-KW., the addition being two Wetherill cross compound engines, direct connected to 1,000-KW. Allis-Chalmers alternators.

ROANOKE, VA.—J. W. Hancock, Gen. Mgr. and Pur. Agt., states that the Roanoke Railway & Electric Co. has obtained a franchise from the city of Roanoke for an extension of its Belmont line in the southeast section of the city; also an extension of the Franklin Road line, and for a new line about one mile in length into the southwest section of the city. Under the terms of the franchise the company is required to have the lines in operation within one year, and it is planned to do the work during the coming summer.

SPARTANBURG, S. C.—The Greenville & Spartanburg Electric Ry. Co. has been granted a charter. The company proposes to build an electric railway from Greenville to Spartanburg, passing through Greers and all the mill towns between Spartanburg and Greenville. The company will be capitalized at $100,000. The incorporators are: O. K. Mauldin, H. H. Prince, A. A. Gates and C. C. Good. Concerning this project the following was noted on Dec. 26, under Greenville, S. C.: "The Greenville Interurban Co. has begun a survey of its proposed electric railway from Williamston to Greenville. Right-of-way for another line, which it proposes to build from Greenville to Spartanburg, is now being secured. At a recent meeting of the stockholders, several new directors were added to the board, and changes were made in the officers. H. H. Prince resigned as President and John C. Carey was elected to succeed Mr. Prince. A. A. Gates was elected Vice-Pres. and C. C. Good, Secy. and Treas. H. H. Prince was elected Gen. Mgr. A. L. Scott, of the engineering firm of Lockwood, Greene & Co., 93 Federal St., Boston, was added to the board of directors with Geo. E. Coughlin, of Anderson, S. C. It is announced that the company has completed all necessary arrangements for financing the enterprise."

FITZGERALD, GA.—C. A. Holtzendorf, Secy. and Treas. of the Fitzgerald & Ocilla Elec. Ry. & Power Co., Fitzgerald, informs us that right-of-way has been secured for the proposed line. It will be 14 miles in length and will be constructed in the city of Fitzgerald and from Fitzgerald to Ocilla. Surveys are not made. S. Tilden Holtzendorf is Pres., 118 East 16th St., New York.

QUITMAN, GA.—The Quitman, Thomasville & Valdosta Electric Street Railway & Power Co. was granted a franchise and the exclusive rights of the principal streets of Quitman at a recent meeting of the Council. A. C. McLeod is Pres.

SHREVEPORT, LA.—The Shreveport Suburban Railway Co., capital $50,000, has filed its charter for an electric line. Work has begun. John Lorenz is Pres. and J. B. Atkins is Secy.-Treas. Noted on Feb. 6.

COVINGTON, LA.—The St. Tammany & New Orleans Railway & Ferry Co.'s proposed line will be about 18 miles long, connecting Covington, Abita Springs and Mandeville, La. The company is doing its own construction, and all material and equipment will be purchased directly. The directors are Clay Riggs, Pres.; Lewis L. Morgan, Vice-Pres.; and Joseph Birg. Preston Herndon is Ch. Engr. Previously noted.

NEW IBERIA, LA.—The City Council has granted the Bayou Teche Light & Railway Co. an extension of 30 days of the franchise or agreement by which the company should have on the ground $10,000 worth of material and labor for the actual construction of the road. This extension is given to permit the bona fide commencement of the work, and failure to do so shall work a forfeiture of the franchise and of the $50,000 deposit which was put up by the company a year ago. As noted on Nov. 7, the HUSTON ENGINEERING CO., 613 Macheca Bldg., New Orleans, has the engineering and construction contract for the Bayou Teche Railway & Light Co.'s line. H. R. Fine is Mgr., New Iberia.

SPRINGFIELD, ILL.—The Mississippi Valley Interurban Railway Co. has been incorporated. The object is to construct an electric railway from Springfield, through Petersburg, Virginia, Rushville and Mount Sterling to Quincy; from Mount Sterling to Pittsfield, Hardin, Jerseyville, Winchester, Jacksonville and Hillsboro; from Hillsboro to Greenville and Shelbyville, through Ohnanco and Vandalia, and from Greenville to Carlyle, Nashville, Pinckneyville and Murphysboro. The capital stock of the company is $1,000,000 and the headquarters will be at Springfield. The incorporators and directors are: James H. Ward, Butler, Ill.; George E. Watson, Hillsboro, Ill.; H. R. Lakin, Rochester, Ill., and John E. Melick and F. A. Melick, Springfield, Ill.

EMMETSBURG, IOWA.—M. H. Miller, Vice-Pres. of the Spirit Lake, Emmetsburg & Fort Dodge R. R. Co., Fort Dodge, advises us that company expects to let construction contracts about May 1. Greater part of right-of-way has been secured. Survey has been run. As noted on Jan. 30, this railway will be 110 miles long. It will connect and run through the following cities and towns: Fort Dodge, Clare, Lizard, Pocahontas, Havelock, Mallard, Emmetsburg, Spirit Lake, Graettinger, Terril and Milford. The company will operate an amusement park seven miles north of Fort Dodge, and also will furnish current from its own power station to towns along the route. The repair shops are to be located at Emmetsburg. The officers of this company are as follows: T. F. McCartan, Pocahontas, Pres.; M. H. Miller, Fort Dodge, Vice-Pres. and Acting Gen. Mgr.; P. O. Refsell, Emmetsburg, Secy., and D. O. Johnson, Emmetsburg, Treas. The Spirit Lake, Emmetsburg & Fort Dodge Railway was incorporated on July 11, 1907. Capital stock, $500,000.

THIEF RIVER FALLS, MINN.—The Thief River Falls Elec. Ry. Co. has been incorporated and officers elected. Capital stock, $50,000. The officers are: Pres., D. N. Winton; First Vice-Pres., D. P. O'Neill; Second Vice-Pres., M. Forder; Third Vice-Pres., M. V. Evenson; Secy., T. P. Hamre; Treas., L. M. Hoag; Counsel—G. Halvorson; Directors, O. J. Schiel, John Morgan, M. V. Evenson, T. P. Hamre, L. M. Hoag, D. B. Bakke, C. M. Evenson, G. Halvorson, M. Forder, D. P. O'Neill, Olaf Ramstad, D. Shaw, D. N. Winton, Math. Barzen, C. C. Jackson, W. W. Prichard, I. L. Erickson, Goodnow Torrison, C. A. Robbecke, H. P. Spoonheim and H. G. Dobner.

It is the intention of the company to build an electric line into the country northeast of Thief River Falls, but no definite route has been selected, nor will one be until assurance can be had from the farmers that a free right-of-way and other concessions are granted.

ABERDEEN, S. DAK.—J. A. Cleaver and others, of Huron, S. Dak., will apply to the City Council for a 20-year franchise to equip and maintain an electric street railway in Aberdeen.

DENVER, COLO.—The Fruita Land & Power Co. has been incorporated with $1,500,000 capital, to construct an electric railway from De Beque to Fruita, a distance of 40 miles, and to build a power plant on the Grand River, from which the electric current will be supplied. In addition, an irrigation system is being laid out to reclaim 20,000 acres of land. The incorporators and officers are: Horace K. Devereaux, of Colorado Springs, Pres.; J. Arthur Connell, Vice-Pres.; Orson Adams, E. A. Sunderlin, Secy. and Treas. The above financial management is in the hands of the Commonwealth Securities Co., Commonwealth Bldg., Denver. The power plant is the first part of the project to be completed. Active work has already begun. The site is on the river near De Beque. Its total cost is estimated at $600,000. 6,650-HP. will be developed.

WALLA WALLA, WASH.—Application for a franchise for the Washington & Oregon Traction Co. will be made to the County Commissioners at Walla Walla, on April 6. The company was recently granted a franchise by the City Council of Walla Walla. The construction of an electric railway into the Blue Mountains is planned. Alden H. Reynolds, C. K. Halloway and W. A. Ritz are interested in this project.

OAKLAND, CAL.—Articles of incorporation have been filed in California for the San Francisco & Bay Counties Ry., which plans to operate an electric railway between Oakland and San Jose in opposition to the Southern Pacific. F. M. Smith, C. Havens, E. A. Heron, Mgr. of the San Francisco, Oakland & San Jose R. R., known as the "Key Route," George E. Pratt and Dennis Searles are named as directors of the new railway. E. A. Heron announces that this project is an outgrowth of the Key Route. The actual laying of track will commence within 60 days according to Mr. Heron. The terminus of the line will be at the Key Route pier by way of Berkeley. The line will be operated in competition to the Southern Pacific electric line which is to be constructed on the San Mateo side of the bay. The company is known as the Peninsula Ry. Co. and was incorporated in San Francisco under the direction of F. H. Harriman. The proposed San Francisco & Bay Counties Ry. line will come up at Berkeley and skirt the Berkeley hills, reaching upper Piedmont and opening up a stretch of foothill lands beyond and the general direction of Hayward. The engineers of the Key Route are now preparing survey maps. About five years ago the San Francisco, Oakland & San Jose R. R. was incorporated and franchises for track privileges secured in Oakland, Berkeley and Piedmont. This was followed by the inauguration of the ferry system between Oakland and San Francisco. At the time F. M. Smith announced that it was the intention of the company to operate an electric line between Oakland and San Jose. The San Francisco & Bay Counties Ry. is capitalized at $250,000, of which $70,000 has been subscribed.

MONTREAL, QUE.—The Montreal Street Railway Co. is considering the question of large extensions to its system not only within the city limits, but on the Island of Montreal. The company has in view the expenditure of a large amount of money during the coming season, it is reported. This expenditure will include the construction of several new lines to be built in the suburbs and along the lake shore. A new circuit will connect the Back River and the Cartierville systems. R. M. Hannaford is Ch. Engr.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

CONCORD, N. H.—The Concord Electric Co. is contemplating the construction of a steam plant to be used as an auxiliary to the Sewall's Falls power plant. It is expected to have the plant installed and ready for operation by next fall. George B. Lauder, Concord, is Supt. and Ch. Electrician.

SPRINGFIELD, MASS.—The United Electric Co. will expend $50,000 this year for underground conduits in the Forest Park section. Work is to be started as soon as possible this spring. W. L. Mulligan, 133 State St., Springfield, is Mgr. It is also reported that the Postal Telegraph Co. will have to place its wires in Belmont Ave. underground.

WILMINGTON, DEL.—Bids are asked by the Street and Sewer Department until March 31 (extension of time) for lighting the streets of the city with electricity. Howard B. Griffith is City Engr.

BALTIMORE, MD.—It is stated that the Crown Cork & Seal Co., bottle-cap manufacturer, Guilford Ave. and Oliver Sts., will erect addition to power-house at Highlandtown which will have one story, 30 x 60 ft., and will be constructed of brick. The plans have been prepared by Charles M. Anderson, 324 North Charles St. The following firms are estimating: Henry S. Rippel, 7 Clay St.; George Bunnecke & Sons, 305 St. Paul St.; Morrow Bros., 216 West Saratoga St.; Monmonier & Sorrell, 308 Lawrence St.; J. Henry Miller, 110 Dover St.; J. J. Walsh & Sons, 1525 Maryland Ave.; Henry Smith & Sons Co., 216 South Regester St.; D. M. Andrews & Co., Vickers Bldg., and Wells Bros., Union Trust Bldg.

SUFFOLK, VA.—The Suffolk Gas Co. will expend about $125,000 in completing a gas plant to have a daily capacity of 150,000 cu. ft. Frank D. Moses is Engr.; J. A. Bargers is Mgr.

GREENSBORO, N. C.—The Greensboro Electric Co. will expend $75,000 in construction of belt line gas main around city and enlargement and reconstruction of gas-house. Ernest Gonzenbach, Greensboro, is Mgr.

CENTERVILLE, ALA.—Cahaba Power Co. has been incorporated with H. H. Reynolds, Pres.; W. L. Pratt, Vice-Pres., and J. P. Kennedy, Secy.-Treas. It plans to develop five water-power properties, ranging from 400 to 1,500 HP., on Cahaba River. It will build a plant at Centerville and transmit power by electricity with a dam to be of stone and concrete, probably 200 feet long and 23 ft. high. About 700 HP. to be obtained. E. B. Kay, University, Ala., is Engr.-in-Charge.

GUNTERSVILLE, ALA.—The Guntersville Electric Light & Power Co. will establish an electric light plant. The building is erected but machinery has not been purchased. V. V. Moore is Mgr.

CHARLESTON, MISS.—W. C. Myers will construct an electric lighting plant here and will need equipment for same.

WAYNESBORO, MISS.—The city will build a water-power electric light plant, for which $12,000 of bonds were recently voted. An engineer will make plans and specifications for dam, machinery, etc., and bids will be advertised. J. R. Huggins is Clerk.

CHATTANOOGA, TENN.—John Bogart, 16 Exchange Pl., New York, N. Y., Engr. of the Chattanooga-Tennessee River Power Co.,

advises us that contract has been let to ELLIS H. BAILLIE, 26 Court St., Brooklyn, N. Y., for continuing to completion of construction of a power plant at Hales Bar, twelve miles below Chattanooga. Legal complications recently interfered with completion of previous contract. This plant will ensure permanent improvement for navigation of 35 miles of the Tennessee River and provide a water-power electrical development for a capacity of 56,000 HP. The power-house will have 14 units, each of 4,000 HP., and ten will be installed before end of 1909. A dam 1,200 ft. long, 50 to 60 ft. high above rock bottom of river, will be built of masonry and concrete. The power-house will be 60 × 220 ft. Electricity will be transformed to 60,000 volts, then transmitted to substation near Chattanooga and there changed to voltage suitable for distribution for lighting and manufacturing. The company will construct a double transmission line, each to have three copper cables supported on steel towers with about 500-ft. span between each. Construction will include a 300-ft. lock, 60 ft. wide. All plans have been prepared by U. S. Army Engineers and engineers of company and approved.

COLUMBUS BARRACKS, OHIO.—Bids are asked until 10 a. m., March 14, by Capt. H. J. Hirsch, Q. M., for furnishing and delivering electric light fixtures for three double sets lieutenants' quarters and all necessary material for electric light wiring, electric bell system and speaking tubes for the above mentioned buildings, including conduit, wire, switches, panel boards and cabinets, annunciators, tools, etc.

GRAND RAPIDS, MICH.—See under Manufacturing Plants.

MARQUETTE, MICH.—The Board of Light and Power Commissioners has decided to build a substation on Bluff St., in accordance with the recommendation of C. W. Humphrey, of Chicago, Ill. The cost of the building, including machinery, is estimated at $12,000.

NORTH MILWAUKEE, WIS.—The North Milwaukee Light & Power Co. is planning changing part of its present system of 110-volt direct, to alternating-current, 3-phase, 60-cycle. In addition to a 75-KW., 3-phase, 60-cycle generator, the company will want an engine of 75 to 125-HP. generator and feeder panels for alternating-current generator and prices on Corliss and medium speed engine, also on alternating-current motors, 220-volt, 3-phase. The company intends heating by exhaust steam. Theodore A. Walch is Gen. Mgr.

VIOLA, WIS.—E. R. Cushman is preparing plans for a light and power plant to cost from $15,000 to $20,000.

MINNEAPOLIS, MINN.—Bids are asked by Hugh R. Scott, Audr., Hennepin County, until 11 a. m., March 16, for furnishing a lighting plant for the County Farm.

CROOKSTON, MINN.—The Crookston Water-Works, Power & Lighting Co. intends to construct a dam eleven miles northeast of this city and has purchased a site comprising more than 1,000 acres. E. Peterson is Supt., Crookston.

IOLA, KAN.—Plans and specifications are being prepared by John Stanton, State Archt., State House, Topeka, Kan., for the power plant to be built at the State University, at a cost of $50,000. The mechanical laboratories of the engineering school will be housed in this building.

RAPID CITY, S. DAK.—The Dakota Power Co. is making arrangements to develop the water power of Rapid Creek for the purpose of generating electricity to be transmitted to Rapid City and the mining camps in the hills. The company will erect a power-house in the spring about twelve miles from this city. The city recently granted the company a franchise to furnish electrical energy for lamps and motors in the city. A. V. Thomas is City Audr.

CHEYENNE, WYO.—C. T. Johnston, State Engr., has denied the application of the Big Horn Power Co. for permission to erect a 60-ft. power dam in the south end of the canon of the Big Horn River, as it would interfere with the railway right-of-way through the canon. It is stated that a permit may be granted for erection of a 35-ft. dam, and it is expected that the Big Horn Power Co. will erect a dam on the modified scale.

MARBLE FALLS, TEX.—G. W. Voires, Vice-Pres. and Gen. Mgr., advises us that the Granite Mfg. Co., of Dallas, Tex., incorporated with a capital of $500,000, has retained the services of Dwight F. Horton, C. E., of Houston, Tex., as Des. and Constr. Engr. to build a dam across the Colorado River at Marble Falls, Tex., for the purpose of power development and electric transmission, the work all to be done by day labor, by the company. Power is to be transmitted at 33,000 volts in territory within a 50-mile radius of Marble Falls. A maximum development, to be about 10,000 KW., is to be built, in units of 1,000 KW. each, four of which will be installed at once.

NAVASOTA, TEX.—The R. A. Horlock Co. has secured franchise and will install machinery for furnishing electric lights. The equipment will include 250-HP. Corliss engine, 120-KW., 3-phase, 60-cycle alternating and a duplicate 50-KW. direct-connected generator, marble switchboards, transformers, etc. R. W. Horlock is Mgr.

SAN ANGELO, TEX.—The San Angelo Traction Co., J. H. Ransom, Pres. and Gen. Mgr., will install an electric power plant for street railway. A brick building 38 × 52 ft. will be erected. Bids not yet received.

FORT WORTH, TEX.—The city will improve its electric light plant so as to furnish about 900 additional arc lights. About $50,000 will be expended for new machinery. Samuel Davis is City Comr.

SILVER CITY, N. MEX.—The El Paso, Tex., "Herald" states that the Forest Service, Washington, D. C., has issued to the Forest Power Co., of Silver City, N. Mex., a permit to construct and maintain an electric power-house and transmission line in the Gila (S.) National Forest. It is the purpose of the company to generate electricity by steam and transmit it to the town of Pinos Altos. The power house and wood yard will occupy a site of ten acres in Sec. 30, T. 5 S., R. 13 W., and the transmission line will extend south from the power-house about eight miles to Pinos Altos. The company pays for its right-of-way at the established rate of $1 a year per acre for the power-house and wood-yard, and $5 a year per mile for the transmission line. Gilliford Pinchot is Forester, Dept. of Agriculture.

SEATTLE, WASH.—Bids for the construction of concrete walks on Third Ave. and the installation of electric light conduits under the sidewalks and the erection of ornamental light poles on that thoroughfare from Yesler Way to Pike St. were opened by the Board of Public Works on Feb. 15. The work was divided into two sections by the Board, one being the excavating, conduits and sidewalks, and the other referring to the strictly electrical equipments. In the first section of the work a subdivision was made in the conduits, one being on black pipe and the other being on loricated conduits. The bids on these were: Meacham & Babcock, $44,023 and $59,882; H. T. Jahn & Co., $51,029 and $66,008; Sparger Concrete Co., Colman Bldg., $59,824 and $74,855; F. McLellan & Co., People's Savings Bank Bldg., $53,773 and $61,537. Only two bids on the electrical equipment were received, Meacham & Babcock bidding $8,005 and the Agutter, Griswold Co., 1406 First St., $9,512.

ENTIAT, WASH.—The Entiat Power Co., capital $200,000, organized by A. B. Gray, M. D. Barash and J. H. Allen, of Seattle, will erect a power plant at Entiat Falls, on the Columbia River, to supply light and power to surrounding cities.

TACOMA, WASH.—Frank L. Davis, City Engr., has submitted to the City Council an estimate of first cost, together with operating expenses and efficiency of a steam power plant to be used for generating electricity for auxiliary lighting purposes. For a 5,000-HP. plant with a 50% load factor he estimates the cost at $500,000, and the cost of operating the plant, including fixed charges, coal, depreciation, interest, etc., at $285,813 a year, making the cost of the electrical energy to the city 1.31 cts. per KW.-hour, as against 1.25 cts. now paid by the city to the Seattle-Tacoma Power Co., under a 5-year contract for 5,000 HP. For a 5,000-HP. plant with a 30% load factor the cost of the plant is estimated the same, but the cost for operating, fixed charges, etc., is placed at $198,686, making the price of electricity, 1.51 cts. per KW.-hour. The cost of a 2,000-HP. plant with a 50% load factor is placed at $275,000, and the fixed charges are placed at approximately $122,374, making the cost of production 1.4 cts. per KW.-hour. For a 2,000-HP. plant with a 30% load factor with fixed charges at approximately $88,027, the price for electricity would be 1.68 cts. per KW.-hour. Both the City Engineer and the Commissioner of Public Works favor a water-power plant.

CANBY, ORE.—The Molalla Power Co. has filed articles of incorporation and proposes to take over the plant and business of the Aurora Electric Co., now operating at Aurora, and supplying Hubbard, Aurora, Barlow and Canby with electric lights. The company has arranged to issue bonds to amount to $15,000. The new company proposes to locate the Aurora plant on the Molalla River, about 3½ miles southeast of Canby, where rights have been secured.

MARSHFIELD, ORE.—It is stated that the Coos Bay Gas & Electric Co. will commence work soon on the construction of an electric plant at Porter to supply electricity in both Marshfield and North Bend for lighting and manufacturing. The present plants in both towns will be held as emergency stations. S. H. Bell is Mgr.

OROVILLE, CAL.—The Northern California Mining Co., of which H. H. Yard is the chief owner, is completing plans for two power plants to be built upon its property in the mountains above here and to supply electricity for use in mining enterprises and for other purposes.

REDLANDS, CAL.—The Los Angeles "Examiner" reports that C. S. Chesnut, Pres. of the Home Gas & Electric Co., of Redlands, is organizing a consolidated gas and electric company for the Santa Ana Valley and announced that his plans are practically complete. The proposed company will be capitalized at $1,000,000 and will furnish electricity to Redlands, San Bernardino, Colton, Highgrove, Crestmore and gas to these cities and to Riverside. The Independent companies of Redlands, Colton, San Bernardino and Riverside will be taken into the new company, which will be known as the Consolidated Gas & Electric Co. The present gas plants at Redlands and San Bernardino will be closed and the machinery moved to the Colton plant or sold, and a gas plant will be erected at Colton with tanks with 200,000 ft. capacity. The gas will be piped to Redlands, Riverside, San Bernardino and other cities from Colton and held in tanks in these cities for local use. The electric light plant of the Home Gas & Electric Co. in Redlands will be enlarged and made the principal plant of the Consolidated company. For this reason the main offices of the company will be located in Redlands. Pipes will be laid in Riverside and these will be connected with the plant at Colton.

SPARKS, NEV.—It has been announced that the Southern Pacific Co. will install an electrical plant to supply power and lighting to its shops here. The plant will be equipped with 540 HP. and will entail an expenditure of over $30,000. THE GENERAL ELECTRIC CO., Union Trust Bldg., San Francisco, Cal., has contract for the work. J. F. Dunn, Salt Lake City, Utah, is Supt. Motive Power.

OTTAWA, ONT.—J. B. McRae, C. E., and William Kennedy, C. E., are considering the plans for the proposed Chaudiere dam, the construction of which has been decided upon for this season. The structure will be of steel and concrete construction and will cost about $150,000.

BRIDGES.

(* *denotes that this work is advertised in Engineering News.*)

BRIDGEPORT, CONN.—Plans have been prepared for strengthening the lower bridge on Stratford Ave., and have been approved by the Director of Public Works. Estimated cost, $17,000.

*HARTFORD, CONN.—We are officially advised that twelve bids were received on Feb. 26 by the Connecticut River Bridge and Highway District for furnishing and erecting in place the tunnel roof beams, in connection with the western approach to the Connecticut River bridge at Hartford. The Berlin Construction Co., Berlin, Conn., submitted the lowest bid. John T. Henderson is Deputy Ch. Engr. Conn. River Bridge and Highway Dist.

BUFFALO, N. Y.—Bids are asked until March 10 by the Department of Public Works for the construction and erection of the necessary additional counterweights on the Michigan St. bascule bridge over the Buffalo River. Francis G. Ward is Comr. Pub Wks.

ELWOOD CITY, PA.—The contract for the construction of the bridge over the Connoquenessing River, east of the tunnel on the Baltimore & Ohio R. R. near this city, has been awarded to the YOUNGSTOWN CONSTRUCTION CO., Youngstown, Ohio. The bridge will be of structural steel, and will be built at the side of the present structure, after which it will be moved to the site of the present bridge.

WASHINGTON, PA.—Bids are asked until noon, March 24, by the County Commissioners for constructing the following county bridges: One steel plate girder bridge, 50-ft. span, at Good Intent, West Finley Township, over a branch of Wheeling Creek; one steel plate girder bridge, 56-ft. span, near Kammerer's store in Nottingham Township, over Mingo Creek; one steel plate girder bridge, 56-ft. span, at Middletown station, over Cross Creek, in Crosscreek Township; (all to have concrete brick-covered floors); one 20-ft. diameter concrete arch, over Two Mile Run, in Centerville Borough, with broken stone driveway; one steel reinforced concrete bridge, 10-ft. span, near Gabby's school on the Plank Road, in North Franklin Township, broken stone driveway; one 6-ft. diameter concrete arch, with broken stone driveway, near Gabby's residence, on the Plank Road, in North Franklin Township; also a new 5-ft. sidewalk put in place on the low truss bridge over Chartiers Creek, on Jefferson Ave., in Canonsburg, Pa. William Wylie is County Engr. H. R. Campbell is Ch. Clk. Comrs.

WILKES-BARRE, PA.—We are officially advised that the PENN BRIDGE CO., Beaver Falls, Pa., was awarded the contract on Feb. 25 by the city for repairing the substructure and superstructure of the steel truss bridge over Harney's Lake, Luzerne County.

BETHANY, W. VA.—The contract for the construction of a steel highway bridge near this city has been awarded to the JONES & LAUGHLIN STEEL CO., Third Ave., Pittsburg, Pa.

MONTGOMERY, ALA.—AUSTIN BROS., Atlanta, Ga., have secured the contract for constructing a steel bridge in Montgomery County. J. T. Bullen is County Engr.

OWINGSVILLE, KY.—A bridge will be constructed over the Licking River, at Farmers and Salt Lick crossing, connecting Bath and Rowan Counties.

TOLEDO, OHIO.—JOSEPH WOLF was awarded the contract on Feb. 21 by the County Commissioners for constructing the concrete masonry abutments for the bridge over Swan Creek on Ottawa Terrace, at $17.78 per 100 cu. ft. L. B. Bailey is Chn. Comrs.

COLUMBUS, OHIO.—Bids are asked by the County Commissioners until noon, March 20, for reflooring the Russell bridge over Alum Creek, Mifflin Township. F. M. Sayre is County Audr.

NOTTINGHAM, OHIO.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of a concrete bridge over Euclid Creek. Bids are asked until March 14.

TOLEDO, OHIO.—The plans of the Lima & Toledo Traction Co., 1109 Traction Bldg., Cincinnati, Ohio, for the construction of a drawbridge over Swan Creek, have been approved. The structure will be located between the Clover Leaf bridge and the Huebner Toledo Breweries Co.'s plant. Thomas Elliott, Traction Bldg., Cincinnati, is Consult. Engr.

MOUNT VERNON, IND.—Bids are asked until March 16 by the County Commissioners for the construction of the Zergiebel bridge.

MINNEAPOLIS, MINN.—Bids are asked until 11 a. m., March 16, by the Board of County Commissioners, Hennepin County, for constructing bridges Nos. 122 and 329, and also painting various bridges. Hugh R. Scott is County Audr.

ASHLAND, NEB.—The contract for the construction of a steel bridge across Salt Creek in Silver St. has been awarded to the CANTON BRIDGE CO., Canton, Ohio.

RICHMOND, MO.—The City Engineer has been instructed to prepare plans and specifications for the construction of a bridge on Whitmer St. and extension of bridge on College St. Bids will be asked at once.

HOUSTON, TEX.—Bids are asked by John B. Ashe, County Audr., Harris County, until noon, March 10, for constructing various bridges across the Friendswood Road.

*ROSENBERG, TEX.—We are officially advised that the following bids were received on Feb. 17 by the Fort Bend County Commissioners for the construction of bridge over Brazos River: Virginia Bridge Co., New Orleans, La., $33,600; Leversedge Bridge Co., Fort Worth, Tex., $29,140; Missouri Valley Bridge Co., Leavenworth, Kan., $27,200; M. S. Hasie, Dallas, Tex., $29,770; Midland Bridge Co., Kansas City, Mo., $29,500; C. Y. Sheeley, Denver, Colo., $28,700; Pennsylvania Bridge Co., Beaver Falls, Pa., $27,200; Ottumwa Bridge Co., Ottumwa, Iowa, $27,000; C. Q. Horton, Austin, Tex., $28,900; Moravia Construction Co., Dallas, Tex., $30,699. J. N. Maxcy is Consulting Engr., Houston, Tex.

SULPHUR, OKLA.—Congress has appropriated $20,000 for the construction of a bridge across Rock Creek in the Platt National Park.

GUTHRIE, OKLA.—The TOPEKA BRIDGE & IRON WORKS, Topeka, Kan., has been awarded the contract for the construction of a bridge, 110 ft. long, here, at about $9,000.

TULSA, OKLA.—The Tulsa County Commissioners have engaged R. K. Hughes, Bridge Constructing Engr., to prepare plans and specifications for the construction of 16 bridges to be erected in Tulsa County.

EMPIRE, COLO.—Bids are asked until noon, March 18, by T. W. Jaycox, State Engr., for the complete construction of a reinforced concrete bridge, with 30-ft. span, across South Clear Creek, near Empire, Clear Creek County.

SILT, COLO.—The Garfield County Commissioners have rejected all bids for the construction of a steel reinforced concrete bridge, with 252-ft. span and concrete abutments, across the Grand River, at Silt, which was designed to hold up a 16-ton traction engine. T. W. Jaycox State Engr., Denver, Colo., is preparing plans and specifications for a less expensive structure to hold up a 12-ton engine. List of bidders noted Feb. 13.

MALTA, COLO.—Bids are asked until March 6 by T. W. Jaycox, State Engr., Denver, Colo., for constructing a reinforced concrete arch bridge of two 35-ft. spans, across the Arkansas River, about four miles below Malta.

DENVER, COLO.—Plans are being prepared by the Board of Public Works for the construction of a bridge of ornamental iron work over Cherry Creek, at Logan Ave. Estimated cost, $40,000. John B. Hunter is City Engr.

EVERETT, WASH.—The AMERICAN PILE DRIVING CO. has been awarded the contract for the construction of a bridge here at $6,825.

PORTLAND, ORE.—The City Council has passed ordinance appropriating $1,000 and authorizing the employment of a consulting engineer to assist D. W. Taylor, City Engr., to prepare plans and specifications for the construction of a high bridge across the Willamette River north of the steel bridge. Estimated cost, $3,000,000.

TUCSON, ARIZ.—Bids are asked by the Board of Supervisors, Pima County, until 10 a. m., March 11, for the construction of the substructure, approaches and floor beams, steel trusses and floor for a 5-span bridge over the Rillito River on Mammoth Road, four miles north of Tucson. Bertram L. Hitch is Clk. Bd.

QUEBEC, QUE.—The Quebec Bridge Co. has decided to rebuild the steel cantilever bridge over the St. Lawrence River, which collapsed last spring.

CAINSVILLE, ONT.—The Toronto, Hamilton & Buffalo Ry. Co. contemplates having a steel bridge on heavy concrete abutments constructed here. E. Fisher, Hamilton, Ont., is Gen. Supt. and Ch. Engr.

OTTAWA, ONT.—The Canadian Railway Commissioners have authorized the Canadian Pacific Ry. Co. to construct bridges as follows: Over Belly River at Lethbridge, Alta.; at mile 35.2 over Carpenter Creek, B. C.; at mile .72 over Fraser River, Mission Branch, B. C.; at highway crossing at Bala, Ont.; at mile 7.32, Mud Branch, Thames River, Ont.; at mile 8.2 over Thames River, Ont.; at mile 9.14, Huron St. crossing, Embro, Ont.; at mile 18.9, Brockville Branch, Ont.; at mile 34.6 over Badger Creek, Man.; at William St. Subway and also approved plan of abutment and piers of proposed bridge over Pine St. at Woodbridge, Ont. C. N. Monsarrat, Montreal, Que., is Engr. Bridges.

GLENELG, N. B.—Bids are asked until March 9 by C. H. La Billois, Ch. Comr., Dept. Pub. Wks., Fredericton, N. B., for rebuilding the Fraser bridge here.

HILLSBOROUGH, N. B.—Bids are asked until March 23 for constructing Mill Creek mouth bridge, Albert County. C. H. La Billois is Ch. Comr., Dept. Pub. Wks., Fredericton, N. B.

ST. STEPHEN, N. B.—The New Brunswick Southern Ry. Co. is asking Parliament for authority to construct a bridge over the St. Croix River. R. J. Austin, St. John, N. B., is Bridge Foreman.

NEW WESTMINSTER, B. C.—J. A. L. Waddell, 2708 Forrest Ave., Kansas City, Mo., has estimated the cost of the Lulu Island steel bridge at $76,000.

*BRANDON, MAN.—The time for receiving bids for the construction of reinforced concrete and steel bridge with approaches over the Assiniboine River has been extended from Feb. 20 to March 14.

CLARENDON, B. C.—Bids are asked until March 9 by C. H. La Billois, Ch. Comr., Dept. Pub. Wks., Fredericton, N. B., for rebuilding the Bryson bridge.

BUILDINGS.

(* *denotes that this work is advertised in Engineering News.*)

MONTPELIER, VT.—We are officially advised that Swallow & Howes, 500 Fifth Ave., New York, N. Y., submitted the lowest bid, at about $125,000, for constructing a 3-story and basement city hall here. The specifications call for brick and stone non-fireproof construction. The building will contain an auditorium.

SOMERVILLE, MASS.—Gay & Proctor, Archs., 21 Bromfield St., Boston, Mass., have prepared plans for a bank building to be erected by the Somerville National Bank at a cost of $50,000.

LAWRENCE, MASS.—John Ashton, Blakeley Bldg., Lawrence, has been selected to prepare plans for a grammar school building for the School Board. Estimated cost, $85,000. John Plane is Mayor and Bernard H. Sheridan, Supt. of Schools.

PROVIDENCE, R. I.—Bids are asked by William K. Reynolds, Chn. Com. of City Hospital, until noon, March 18, for the construction of several buildings for a city hospital, at the corner of Eaton and Hillwood Sts. Separate bids for plumbing and gas piping, heating and ventilating, electrical lighting and other electrical equipment will be received. Plans for construction were prepared by Martin & Hall, Archs., 806 Union Trust Co. Bldg., Providence, and for other work at office of French & Hubbard, Engrs., Albany Bldg., Boston, Mass. D. F. Hayden is Clerk.

MERIDEN, CONN.—The following named architects have submitted plans for the new $90,000 armory at Meriden to the State Comptroller: Davis & Brooks, Hartford; Meloy & Beckwith, Bridgeport, Conn.; C. Jerome Bailey, Waterbury, Conn.; Walker & Hazard, New York; Delano & Aldrich, New York; J. C. Spofford, Boston; Herbert Fowler, Boston; Charles Palmer, Meriden, Conn. These plans have been turned over to Adjutant-General George M. Cole for the Arsenal and Armory Commisison, of which he is a member, and after discussion the Commission will decide on which plans to adopt.

WILLIMANTIC, CONN.—Eleven sets of plans have been received by the State Comptroller for the normal school building to be built at Willimantic, and these have been turned over to the State Board of Education, which will not give the names of the architects. The Board will give a public hearing to the competing architects and will determine which plans to accept.

NEW YORK, N. Y.—Bids are asked until 2.30 p. m., March 16, by Robert W. Hebbard, Comr. Dept. Public Charities, for laying new flooring and base throughout Cumberland St. Hospital, Boro. of Brooklyn. Also for repairing and painting the roofs of various buildings at the Metropolitan Hospital, Blackwells' Island.

Otto L. Spannhake, Arch., 233 East 78th St., advises us that he is taking estimates for a 4-story brick and stone building to contain stores and an assembly room. It will be 40 × 70 ft., will cost $60,000 and will be owned by R. Rubel, 143 Suffolk St.

We are officially advised that the Murray & Hill Co., 617 West 130th St., New York, will construct a 6-story brick tenement, 86.3 × 150, irregular, at St. Nicholas Ave. and 165th St. Contracts will be let about March 1. Estimated cost, $150,000. J. C. Crocker, 103 East 125th St., is Arch. Estimates are being taken now.

NEW YORK, N. Y.—Bids are asked until 11 a. m., March 10, by John V. Coggey, Comr. Dept. of Correction, to install a complete new plumbing system in the male prison and administration building of the Kings County Jail, Raymond St., Brooklyn.

Bids are asked by Robert W. Hebbard, Comr. Dept. Public Charities, until 2.30, March 9, for the completion of the abandoned contract of the Church Construction Co., dated Dec. 12, 1905, for the erection and entire completion of the new Municipal Lodging House in the Borough of Manhattan, situated approximately 400 ft. east of First Ave. and on the southerly side of 25th St., the City of New York, together with the abandoned supplemental contract dated June 7, 1907, for the completion of a boiler pit, caisson work, new foundation work, etc.

NEW YORK, N. Y.—We are officially advised that John W. Ingles, Arch., 109 West 42d St., New York, has let general contract to EDWARD CORNING CO., New York, N. Y., for a 4-story building, at Long Island City, for the Long Island R. R. Y. M. C. A. The building will be built of brick and Indiana limestone. It will be 89.10½ × 59.9 ft.

We are officially informed that on Feb. 28, Bird S. Coler, Pres. Boro. of Brooklyn, applied to the Board of Estimate for an appropriation of $500,000 to construct two additional stories to the Kings County Court house, Brooklyn, the Livingston St. part of which was damaged by fire lately. The additional stories will be erected on the Livingston St. side of the court-house. The plans are being considered by Walter Cook, Consult. Arch., Bd. of Estimate.

BUFFALO, N. Y.—Peter H. Frank, 229 Depew Ave., will build two 3-story brick apartment houses at 385-389 Elmwood Ave., to cost $60,000.

MECHANICSVILLE, N. Y.—Jared S. La Dow, Arch., Mechanicsville, writes us that he has completed plans for a 6-story brick, stone and steel theater and arcade to be 60 × 155 ft., and to cost $65,000.

DUNKIRK, N. Y.—We are officially advised that bids were opened on Feb. 25 by the Board of Education for addition and alterations to the High School. P. MEISTER & SON, Dunkirk, N. Y., have been awarded general contract; they have placed structural steel contract with the GEORGE KELLOGG STRUCTURAL CO., Builders' Exchange, Buffalo, N. Y. The whole work will cost about $70,000. Thomas W. Harris, Erie County Bank Bldg., Buffalo, is Arch.

HACKENSACK, N. J.—Bids are asked until 8 p. m., March 11, by the Board of Education for constructing a 2½-story non-fireproof school building, 62 × 51 ft. Estimated cost, $45,000 to $50,000; equipment, $3,000. Robert C. Dixon, 148 Bull's Ferry Road, Weehawken, N. J., is Arch.

PASSAIC, N. J.—We are officially advised that plans for a high school building to be built here by the Board of Education, are being made by John F. Kelley and Davis & Davis, Archs., 1600 Chestnut St., Philadelphia, Pa. The building will cost $190,000 and equipment $10,000.

PHILADELPHIA, PA.—Plans for the Commercial High School for Girls, which is to be built at 15th and Mount Vernon Sts., are being prepared by J. Horace Cook, Arch. Estimates have just been asked by the Board of Education on the cost of grading the lot, which extends on the west side of 15th St. from Mt. Vernon to Wallace Sts., and for a distance of 250 ft. in the rear. The cost of the school which it is proposed to build will be about $500,000. The city during the past two years has taken title to all the ground required for the site. Henry R. Edmunds is Pres. Bd. Public Education.

Bids are asked until noon, March 16, for constructing a House of Detention at Arch and 22d Sts. Plans for the new building, drawn by Philip H. Johnson, Arch., Land Title Bldg., provide for a structure of brick and stone, three stories high in front and four in the rear. The building will face Arch St., with a central entrance opening into a vestibule from which access can be gained to the courtroom, room for witnesses, private offices of the judges, district attorney and other officers of the department. All the second floor will be given to schoolrooms, dormitories for boys and girls, classrooms and other apartments needed in the educational and home life of the inmates of the house. The dining rooms will be on the third floor. Henry Clay is Dir. Dept. Public Safety.

PHILADELPHIA, PA.—Architects will be invited to submit competitive plans soon for a club-house to be erected for the Knights of Columbus. Tentative plans made several months ago call for a 4-story stone and brick structure. The first floor is to contain assembly, reception, library, reading and billiard rooms. The upper stories will contain a large auditorium, lecture and lodge rooms. The basement will contain a large gymnasium and swimming pool. The interior will be finished in white Italian marble, with tile or mosaic floor, and the woodwork will be quartered oak throughout. The Building Committee consists of P. Gormley, 155 North Tenth St.; James J. Flarity; Andrew Conneen, 1256 North Tenth St.; Michael F. Donoghue, 841 North 41st St.; Daniel Wade and Dr. Charles Wallis. Cost, probably $300,000.

Rowland W. Boyle, 1626 Chestnut St., has plans for a 1-story church for the Roman Catholic Church of Our Lady of Victory. It will be built of stone, with open plumbing, tile and marble work, hardwood finish, electric fixtures, slate roof, steam heat and stained glass. Estimated cost, $150,000.

PITTSBURG, PA.—A. B. Shepherd, Dir. of the Dept. of Public Works, has submitted preliminary plans to Councils for the erection of a market-house on Market St. The building will be three stories in height, will be of brick, stone and concrete, and will cost about $900,000.

MERCER, PA.—Owsley & Boucherle, Archs., Wick Bank Bldg., Youngstown, Ohio, have been selected to prepare plans for a court-house to be built at Mercer to cost $200,000.

EAST LIBERTY (Pittsburg post-office), PA.—The Pittsburg "Dispatch" states that members of the East Liberty Y. M. C. A. have appointed a committee to select an architect and to secure bids and take general charge of the proposed $300,000 building for the association to be erected on the lot donated by Henry A. Laughlin. The lot is located near the East Liberty Presbyterian Church. The committee has decided to erect a building similar to the Y. M. C. A. building in Omaha, Neb. Harry A. Baldwin is Gen. Secy., East Liberty Branch of the Pittsburg Y. M. C. A.

SAYRE, PA.—We are officially advised that JOHN BENGER, of Corning, N. Y., has secured the contract to construct a town hall and fire department building at Sayre. Bids were received on Feb. 25. Charles C. West is Chn.

DARLINGTON, PA.—Cope & Stewardson, Archs., 320 Walnut St., Philadelphia, are completing plans for several buildings to be erected at Darlington, Delaware County, for the new House of Refuge for Girls. The proposed buildings will cost about $150,000, with provision for additions to make a total of $300,000. It is intended to ultimately build about 18 cottages to accommodate 30 girls each. The cottages will be T-shaped, measuring about 90 × 25 ft., with a rear central wing about 25 × 45 ft.

MORGANZA, PA.—We are officially advised that Thorston E. Billquist, Arch., 341 Sixth Ave., Pittsburg, Pa., has been commissioned to prepare plans for several proposed buildings for the Pennsylvania Reform School here. The proposed buildings include two dormitory buildings, modern gymnasium and an addition to the powerhouse. Edward McDonald is Chn. Bldg. Com. The new buildings will be designed to replace the present buildings, and others will be designed later in the summer, making an entirely new group. It is estimated that the proposed improvements will cost $200,000. Plans may be ready for estimates in July.

PORTSMOUTH, VA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., April 8, for construction, including plumbing, gas piping, heating apparatus, electric conduits and wiring, of the U. S. post-office and custom-house at Portsmouth.

RICHMOND, VA.—Noland & Baskervill, Chamber of Commerce Bldg., Richmond, and E. G. Frye, Lynchburg, Va., Archs., are preparing plans for improving and enlarging the State Library building at Richmond. $85,000 is to be appropriated.

RICHMOND, VA.—Seymour Davis and Paul A. Davis, 3d, 1600 Chestnut St., Philadelphia, have won the competition for designing the proposed building for the Y. M. C. A. in Richmond, Va. The building will be a 4-story and basement structure, of brick and terra-cotta, and will cost $200,000. It will contain a gymnasium, library, reading room, shooting gallery, ball courts, swimming pool, assembly and lecture rooms and apartments for members.

CHARLESTON, W. VA.—Harding & Upman, Archs., 729 15th St., Washington, D. C., write us that a year ago they prepared plans for a 12-story office building for C. M. Alderson and Samuel Stephenson, to be erected here. The contract was let to the ENGINEERING-CONTRACTING CO., American Bldg., Baltimore, but the construction was delayed, owing to financial conditions. It is expected that the building will be erected this year.

WHEELING, W. VA.—The Y. M. C. A. has had plans revised by Giesey & Faris, Masonic Temple, for a building to be 20 × 114 ft., six stories, of brick, stone and terra-cotta with electrical equipment, steam heat. Estimated cost, $125,000. Bids will be received within 30 days.

ATLANTA, GA.—We are advised by Byron A. Pugin & Sons, Archs., 97½ Peachtree St., Atlanta, that bids will be received in April for a brick, stone and steel 8-story apartment house, 92 × 65 ft., to cost $80,000. Telephone and vacuum-cleaning systems will be installed.

E. S. McCandless, Kiser Bldg., Atlanta, is having plans prepared by Morgan & Dillon, Archs., Prudential Bldg., for a pressed brick apartment house, three stories high, containing six apartments, and to cost $60,000.

AUGUSTA, GA.—L. F. Goodrich, Arch., 115 Eighth St., Augusta, is preparing plans for a 4-story city-hall building 150 × 200 ft., for the city. Stone will be used with concrete floors, hard plaster, gas and electric fixtures, mantels, lavatories, water closets. Cost, $350,000. William L. Martin is Secy. Com.

*BESSEMER, ALA.—Bids are asked until 3 p. m., April 11, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction, including plumbing, gas piping, heating apparatus, electric conduits and wiring of the U. S. post-office at Bessemer.

TUSCALOOSA, ALA.—Bids were received as follows at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Tuscaloosa, Ala.: Algernon Blair, Montgomery, Ala., $104,800; George B. Hinman, Austell Bldg., Atlanta, Ga., $93,490; J. H. Wiese, South Omaha, Neb., $114,218; King Lumber Co., Charlottesville, Va., $114,385; Ambrose B. Stannard, St. James Bldg., New York, $103,438; George Moore & Sons, 521 Eighth Ave., South, Nashville, Tenn., $113,150; Blue Ridge Construction Co., Nashville, Tenn., $96,773; Charles S. Walin, Chicago, $97,742; Miles & Brodt, Atlanta, Ga., $98,089; Gude & Co., Atlanta, Ga., $98,500; W. L. Gallegher & Co., Philadelphia, $123,491. Time to complete: July 1, 1909.

HATTIESBURG, MISS.—We are officially advised that the New Orleans & Northeastern R. R. Co. will erect a brick non-fireproof depot, 40 × 306 ft., with a steam heat building 22 × 22 ft. Estimated cost, $72,000. James C. Haugh is Res. Engr., New Orleans, La.; Frank P. Milburn & Co., Home Life Bldg., Washington, D. C., are Archs.

*JACKSON, MISS.—Bids are asked until 3 p. m., April 10, by James Knox Taylor, Superv. Arch., Treasury Dept., for constructing an extension to the U. S. post-office at Jackson.

NEW ORLEANS, LA.—JAMES STEWART & CO., Hibernia Bank Bldg., have contract at $136,380 for erection of Delgado Memorial Hospital building, five stories, 78 × 90 ft: exterior of French renaissance design of brick and terra cotta; piling of foundation to be capped with concrete. Plans were prepared by Crosby & Henkle, Morris Bldg.

LOUISVILLE, KY.—The Second Presbyterian Congregation will have plans prepared by Clark & Loomis, Archs., 502 Fourth Ave., Louisville, for a brick and stone church costing $80,000, to replace structure recently burned at a loss of $100,000. Dr. Egbert Smith is Pastor.

YOUNGSTOWN, OHIO.—On Feb. 26, CALDWELL & DRAKE, of Columbus, Ind., were awarded contract to construct the proposed Mahoning County Court-house, at $862,000. The lowest bid was submitted by John Gill & Sons, of Cleveland, Ohio, at $794,000. Bids were submitted on Feb. 8. The architect's estimate was $920,000.

TOLEDO, OHIO.—Bids are asked by L. I. Donat, Clk. Bd. of Education, Administration Bldg., Linwood and Southard Aves., until noon, March 23, for the construction of a 4-room addition to the South St. school building, at South and Havre Sts. George L. McKesson is Dir.

CLEVELAND, OHIO.—John Grant & Son, Schofield Bldg., Cleveland, were the lowest bidders, at $218,000, for the construction of the West Side Market House. Bids were received on Feb. 25 by A. R. Callow, Secy. Bd. Public Service.

LA FAYETTE, IND.—Bids are asked by the Trustees of the Children's Home until 9 a. m., March 16, for furnishing material and labor for remodeling and extending the present 2-story brick building. Bids will be received for the entire work, or for any one or more of the subdivisions of the work as set out in the plans and specifications. J. F. Alexander & Son, Trust Company Bldg., La Fayette, are Archs.

INDIANAPOLIS, IND.—Bids are asked by John E. Cleland, Dir. of the School Board, until 1 p. m., March 12, for the erection of a school house west of the river on 21st St. H. C. Brubaker, Aetna Bldg., is Arch.

Rubush & Hunter, Archs., American Central Life Bldg., Indianapolis, have completed plans for a 7-story temple for the Masonic Temple Association. Cost, $400,000.

LANSING, MICH.—H. G. CHRISTMAN & CO., South Bend, Ind., were awarded the contract by the State Board of Agriculture on Feb. 11 for the construction of the agricultural building at the Michigan Agricultural College grounds. The contract price is $147,000, exclusive of heating, plumbing, etc. A. M. Brown is Secy. Bd.; E. A. Bowd, 202 Washington Ave., North, is Arch.

CHICAGO, ILL.—We are officially advised that on March 2 the GEORGE A. FULLER CO., Fuller Bldg., New York, was awarded contract for the construction of the Hotel La Salle at the corner of La Salle and Madison Sts. The total value of the building and ground will be $6,000,000. The building alone will cost $3,500,000. Holabird & Roche, Monadnock Bldg., Chicago, are Archs.

DIXON, ILL.—Bids are asked until 3 p. m., April 9, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for constructing U. S. post-office at Dixon.

FOREST PARK (Chicago post-office), ILL.—E. E. Roberts, Arch., 101 Marion St., Oak Park, Ill., has been selected to design plans for the amusement park for the Forest Park Fair Grounds Co. The buildings will consist of dance hall, pavilion, casino, roller skating rink, etc. Thomas W. Prior, Gen. Supt., on premises, is in charge of buying all material. Estimated cost, $1,000,000.

LA CROSSE, WIS.—Bids are asked by the State Board of Normal Regents, Madison, until March 12, for the erection of a brick 3-story normal school building, 190 × 190 ft., at La Crosse. Cost, $210,000. J. A. Peacock is Pres., Oconomowoc, Wis. Van Ryn & De Gelleke are Archs., 211 Merrill Bldg., Milwaukee; William Kettle, Madison, Wis., is Secy.

MADISON, WIS.—We are officially advised that contract for steel work for the east wing of the Capitol Building, now building, bids for which were received Feb. [illegible], has been let to the MODERN STEEL STRUCTURAL CO., Waukesha, Wis., at $51,987. [illegible] F. Porter is Secy. Comn.

RHINELANDER, WIS.—Sketch plans will be received by the building committee until 2 p. m., March 16 (change of date), for a brick or stone court-house for Oneida County, to cost not more than $100,000. It is to be two stories high, containing on first floor six office rooms and four fireproof vaults not less than 20 × 20 ft. inside measure; on second floor, one circuit court room, one county board room with fireproof vault in connection, one judge's room, two jury rooms, one library and one attorney's room. The basement to contain steam heating plant, fuel, storage and assembly room for public meetings. Arthur Taylor is Chn.

IOWA CITY, IOWA.—Proudfoot & Bird, Archs., Crocker Bldg., Des Moines, advise us that plans will be prepared soon for a Law Building for the State University at Iowa City.

DES MOINES, IOWA.—We are advised by Proudfoot & Bird, Archs., Crocker Bldg., Des Moines, that no time has been set for receiving bids for the proposed City Hall. As planned, the building will have three stories and basement, will be 80 × 234 ft., and will cost $350,000.

CLINTON, IOWA.—Bids are asked until March 10, by the City of Clinton for constructing a brick fire station. Charles P. Chase is City Engr.

ROCHESTER, MINN.—The general contract for the construction of the addition to the main building at the State Hospital here has been let by the State Board of Control, P. M. Ringdahl, Chn., St. Paul, to J. & W. A. ELLIOTT, Lumber Exchange, Minneapolis, Minn.

NORTHFIELD, MINN.—Thori, Allen & Fisher, Archs., Chamber of Commerce Bldg., St. Paul, Minn., are preparing plans for a 3-story pressed brick and cut stone women's dormitory for St. Olaf's College, Northfield. It will be 95 × 204 ft. Prof. P. Schmidt, St. Olaf's College, is Secy. of the Bldg. Com. Cost, $70,000.

WICHITA, KAN.—E. L. Masqueray, Arch., 312 Dispatch Bldg., St. Paul, Minn., is preparing plans for a pressed brick and cut stone church for the Cathedral of the Immaculate Conception, Wichita. Rev. J. J. Hennessy is Bishop and Rev. P. Eihen is Pastor, Wichita. Cost, $100,000.

FORT LINCOLN (Bismarck post-office), N. DAK.—Bids are asked until 1.30 p. m., April 1, by Second Lieut. Bowers Davis, Constr. Q. M., for the construction, hot water heating, plumbing and electric wiring of a brick addition to post hospital at Fort Lincoln.

ST. LOUIS, MO.—Barnett, Haynes & Barnett, Frisco Bldg., will erect an apartment house, for which they are preparing plans. It will have three stories and basement, 233 × 160 ft. and will be constructed of brick. It will contain 36 apartments, lighting and heating plant. Cost, $300,000.

KANSAS CITY, MO.—J. M. Curtice and F. H. Thwing, 106 West Ninth St., will erect proposed office building at a cost of $150,000. Plans have been prepared by Frank S. Rea, Arch., Dwight Bldg. The building will be of fireproof steel construction, 60 × 84 ft.; seven stories high, with basement, steam heat, electric elevators.

COLUMBIA, MO.—Bids are asked by J. G. Babb, Secretary of University of Missouri, Columbia, Mo., until March 21, for erection of agricultural building on horiticultural grounds from plans by Cope & Stewardson, 800 Security Bldg., St. Louis, Mo. Separate bids will be received for foundation up to and including water table.

PINE BLUFF, ARK.—The following bids were opened Feb. 21, at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction, including plumbing, gas piping, heating apparatus, electric conduit and wiring, of the U. S. post-office at Pine Bluff, Ark.: P. A. Bishop, 218 La Salle St., Chicago, Ill., $59,500, time as specified; Pharrow-Windham Construction Co., Birmingham, Ala., $59,800, time as specified; Jacob Aulthaus, St. Louis, Mo., $53,935, time as specified; E. A. Steininger Construction Co., Victoria Bldg., St. Louis, $66,999, time as specified; Southern Construction Co., Mermod & Jaccord Bldg., St. Louis, Mo., $79,000, time as specified; Lane Mitchell, Pine Bluff, Ark., $60,673.91, time, twelve months; Murch Bros., Construction Co., Odd Fellows' Bldg., St. Louis, Mo., $53,990, time, April 1, 1909; J. M. Bishop, Crawfordsville, Ind., $67,100, time, May 10, 1909.

LITTLE ROCK, ARK.—We are officially advised that Edward L. Tilton, Arch., 2 Broadway, New York, has completed plans

for a 1-story and basement library for the Carnegie Library Committee. The structure will be 120 x 65 ft., of irregular dimensions, and will cost $20,000. Charles L. Thompson, Arkansas Bldg., Little Rock, is Arch.-in-Charge. The Committee will advertise for bids for construction.

HOUSTON, TEX.—We are officially advised that Long & Witchell, Archs. for the court-house at Houston, have been ordered by the Commissioners' Court to prepare working drawings for the building, and the formal order has been made for the issuance of $300,000 of bonds. The County Judge of Harris County has been authorized to negotiate for the sale of the bonds as soon as approved by the Attorney General.

EL RENO, TEX.—Bids will be received soon for erecting an opera house building here. It is the intention of Phil W. Greenwalt, Mgr., to erect a new structure to cost about $80,000.

*TYLER, TEX.—Bids are asked until 3 p. m., April 9, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for low-pressure steam heating apparatus for the U. S. post-office and court-house building and extension thereto at Tyler.

COLORADO SPRINGS, COLO.—Bids were received as follows March 2, at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Colorado Springs, Colo.: J. H. Wiese, South Omaha, Neb., $217,280; W. J. Turnes Co., 167 Dearborn St., Chicago, $220,947; Gillis Bros. Lumber & Building Co., Colorado Springs, $223,654; Morrison Contracting Co., Cooper Bldg., Denver, Colo., $231,500; Atkinson Bros., Colorado Springs, $224,000; time to complete, Dec. 31, 1909.

SPOKANE, WASH.—Philip A. Wilson will erect an apartment house at Third Ave. and Wall St. It will be four stories high and will have a frontage of 80 ft. on Third Ave. and 145 ft. on Wall St. The cost will be approximately $90,000. Ellis A. Sanders is Arch.

SEATTLE, WASH.—Howard & Galloway, Superv. Archs. of the Alaska-Yukon-Pacific Exposition, Administration Bldg., have completed plans for the Fine Arts and Machinery buildings. These two buildings are of the group of three structures for which the State Legislature appropriated $600,000 at its last session. They are to be constructed primarily for the use of the University of Washington, but will be adapted for exhibition purposes by the Alaska-Yukon-Pacific Exposition.

It is stated that the First Baptist Congregation, Fifth Ave., Seattle, has decided to erect a church at Madison St. and Broadway, Seattle, to cost $150,000.

SAN FRANCISCO, CAL.—John Cort and Edward Homan, American Theater, 1109 Market St., are interested in constructing a theater opposite the American Theater. The building will be Class A, fireproof and of concrete construction.

OAKLAND, CAL.—The plans submitted by Robert Morgeneier, Arch., 528 East 20th St., Oakland, for a new city hall provide for a 7-story, 200 x 420-ft. fireproof and shock-proof building, to cost approximately $1,250,000.

OGDEN, UTAH.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded to TOM LOVELL & SON, Denton, Tex., contract for the construction of an extension to the post-office at Ogden, Utah, at $76,804. Time, July 1, 1909.

TORONTO, ONT.—The Knox College Building Committee, A. K. Macdonald, Chn., is about to take plans for the proposed $400,000 building.

WOLFVILLE, N. S.—The Trustees of Acadia University will commence the erection of a Science Building soon, to cost $30,000. In addition, $200,000 will be expended in remodeling the present University buildings.

VANCOUVER, B. C.—Hooper & Watkins, Archs., are preparing plans for a 5-story apartment building to be erected for R. V. Winch, of Robert Ward & Co. Estimated cost, $375,000.

Parr & Fee, Archs., 330 Homer St., are preparing plans for a hotel building to be erected, at a cost of $150,000, for A. Caroli, proprietor of the Europe Hotel.

VICTORIA, B. C.—A company composed of D. R. Kerr, F. B. Pemberton, C. A. Holland, J. S. H. Matson, D. M. Eberts, John Nelson, W. Fleet Robertson, Arthur Robertson, R. V. Winch, all of Vancouver, B. C., propose expending $150,000 for the erection of a boarding-school at Victoria, work on which will begin soon.

WINNIPEG, MAN.—Bids are asked until March 20, by Fred. Gelinas, Secy. Dept. Public Works, Ottawa, Ont., for erecting an examining warehouse in this city.

WINNIPEG, MAN.—Cram, Goodhue & Ferguson, Archs., 170 Fifth Ave., New York, N. Y., advise us that they have finished the working plans for a parish house to cost $25,000, for All Saints' Church, Winnipeg. Estimates have not been taken. It is the intention to construct a church to cost $100,000, but as yet no plans have been made. Darling & Pearson, Canada Life Bldg., Winnipeg, are Associate Archs.

MOOSE JAW, SASK.—The Civic School Board has decided to erect a collegiate school building for ladies at a cost of $100,000. William Grayson is Chn. School Bd.

PRINCE ALBERT, SASK.—The city will erect a high school, at a cost of $90,000; also a high school for girls. C. O. Davidson is Clerk.

WATER SUPPLY—IRRIGATION.

NEW BRITAIN, CONN.—The contract for furnishing the pipe for the Burlington water pipe line has been awarded by the Water Commissioners to the UNITED STATES CAST IRON PIPE & FOUNDRY CO., 71 Broadway, New York, at about $185,000. P. M. Blake is Engr. Comrs.

HARTFORD, CONN.—The Board of Water Commissioners, acting on the recommendations of E. M. Peck, has voted to make the fire protection on the East Side more effective by replacing water mains as follows: Arch St., Main to Front Sts., 24-in. main replacing a 6-in.; Grove St., Main to Front Sts., 16-in. main replacing a 4-in.; Central Row, 16-in. main replacing a 6-in.; American Row, 16-in. main replacing a 6-in.; State St., Market to Front Sts., 16-in. main additional; Morgan St., Market to Main Sts., 24-in. main replacing a 6-in.; Market St., State to Morgan Sts., 16-in. main replacing a 6-in. It has also been planned to place three new hydrants on Arch St. It is also contemplated changing the water mains in Walnut and Chestnut Sts.

BUFFALO, N. Y.—Ordinances providing for relaying and enlarging various water mains for the purchase of a site for the Rensington water tower, and for the construction of a valve system and valve house, have been adopted by the City Council. Francis G. Ward is Comr. Pub. Wks.

NEW YORK, N. Y.—A filtration plant may be constructed at Jerome Park, the Department of Water Supply, Gas and Electricity having decided upon this improvement in the water supply. John J. O'Brien is Comr.

McGRAWVILLE (McGraw post-office), N. Y.—Bids are asked by the Board of Water Commissioners at McGraw, H. C. Chaffee, Clk., until March 30, for the construction of water-works, for the village of McGrawville. W. G. Stone, Mann Bldg., Utica, N. Y., is Engr.-in-Charge.

MENDHAM, N. J.—Bids are asked until 8 p. m., March 16, by Leo Robinson, Boro. Clk., for constructing water-works. Noted Feb. 13.

PATERSON, N. J.—A permit to construct a steel water tank, 100 ft. high and with a capacity of 50,000 gals., was issued Feb. 28 by John Quigley, Bldg. Inspector, to the McNab & Harlin Mfg. Co., Straight St., Paterson.

*PHILADELPHIA, PA.—Bids are asked by William R. Knight, Acting Dir. Pub. Wks., until noon, March 17, for Contract No. 130, auxiliary pumps for Torresdale filter plant; Contract No. 139, pump ends for Queen Lane pumping station; Contract No. 141, Lardner's Point pipe connections; Contract No. 142, track scales for Torresdale pumping station.

LOCH RAVEN, MD.—The Maryland School for Boys will expend about $20,000 for construction of system for supplying water and for road improvements. Maurice Lauphelmer, 601 Calvert Bldg., is Secy.

URBANNA, VA.—The city will have installed a water-works system consisting of 15,000-gallon tank on 50-ft. tower, gasoline engine, 4-in. mains and fire plugs.

SUTTON, W. VA.—The SUTTON ELECTRIC LIGHT, POWER & WATER CO. has been awarded the contract by the city to furnish water and electric light for 25 years.

MAXTON, N. C.—Bids are asked by the city until April 1 for the installation of water-works system. R. M. Williams is Mayor.

MONTEZUMA, GA.—A canal water power system and pumping station will be constructed here. Bids are asked by the city until April 1.

ALEXANDRIA, LA.—OSCAR SHANKS has been awarded the contract by the city at about $3,000 to drill an artesian well with a daily capacity of 250,000 gallons.

HUDSON, OHIO.—Bids are asked until March 25 by D. M. Hosford, Consulting Engr., Caxton Bldg., Cleveland, Ohio, for the construction of water-works system here.

CLEVELAND, OHIO.—Bids are asked until noon, March 13, by the Board of Public Service, for furnishing all brass corporation cocks, stop cocks, and stop and waste cocks, that may be required during the year 1908. A. R. Callen is Secy. Bd.

YOUNGSTOWN, OHIO.—F. M. Lillie, City Engr., has completed the second survey of the proposed Berlin Reservoir, which will supply this city with water, and estimates that 1,400 acres will be required. The dam will be built of concrete with a heavy pyramid-shaped breast of the same material. Bids will be asked for early during the coming spring.

SPENCER, IND.—The Home Water-Works Co. has been incorporated, capitalized at $20,000. The company will soon ask for bids for the construction and completion of a water-works system in Spencer. John R. Thomas, J. F. Lawson and J. H. Smith are Directors.

HANOVER, IND.—The Trustees of Hanover College have ordered plans and will soon ask for bids for the installation of a general water system in the college buildings and grounds.

GRAND RAPIDS, MICH.—Bids are asked by the city until March 12, for furnishing about 800 tons cast iron water pipe and specials, valves and hydrants. L. W. Anderson is City Engr.

ROCK ISLAND, ILL.—A mechanical filtration plant may be constructed at the pumping station, the present sand filtration plant being considered inadequate and inefficient.

CHICAGO, ILL.—Bids are asked by the Special Park Commission, 118 City Hall, until 10 a. m., March 7, for the construction of a system of water supply pipes in connection with water service, at East End Park, between 51st and 53d Sts., and at Holden Park, at 56th Ave. and Lake St., Austin. A. W. O'Neill is Secy. Comm.

ROCK ISLAND, ILL.—The Council has adopted a resolution providing for an appropriation of $6,500 for mains in the territory annexed to the city south of 18th St. A. Trackier is City Engr.

JOLIET, ILL.—Board of Local Improvements will have a water main constructed in Division St., at an estimated cost of $4,000. Hubert A. Stevens is City Engr.

MINNEAPOLIS, MINN.—We are officially advised that the following bids were received on Feb. 28 by the City Council for (a) 200 ½-in., (b) 1,500 ⅝-in. (c) 500 ¾-in. corporation cocks: J. B. Clow & Sons, Chicago, Ill., (a) 40 cts., (b) 54 cts., (c) 68 cts.; H. Mueller Mfg. Co., Newark, N. J., (a) 40 cts., (b) 56 cts., (c) 71 cts.; National Mfg. & Supply Co., Minneapolis, Minn., (a) 27 cts., (b) 38 cts., (c) 50 cts. Ellis R. Dutton is Asst. City Engr.

HERINGTON, KAN.—We are officially advised that the following bids were received on Feb. 24 by the city for the construction of water-works and lighting plants: W. F. Hall, Clinton, Mo., $46,964; Freeborn Engineering & Construction Co., Kansas City, Mo., $43,000; N. S. Sherman, Oklahoma City, Okla., $39,968; T. C. Brooks & Son, Jackson, Mich., $37,300; Havemeyer Construction Co., 29 Lake St., Chicago, Ill., $34,984; SQUIRE ELECTRIC CO. Kansas City, Mo., $32,750 (awarded contract). Burns & McDonnell, Kansas City, Mo., Engrs.-in-Charge.

ALMENA, KAN.—We are officially advised that G. JAEGER, Rich Hill, Mo., was awarded the contract on Feb. 18 by the City for general work in the construction of water-works here, at $2,919.

Contracts for furnishing material for the construction of the water-works were awarded as follows: For hydrants and valves, RENNSELAER VALVE CO., for 4 and 6-in. pipe and specials, G. JAEGER, at $32 per ton for pipe and 3 cents per lb. for specials; for standpipe, including foundations, DES MOINES BRIDGE & IRON CO., Des Moines, Iowa, at $2,800. Burns & McDonnell, Kansas City, Mo., are Engrs.-in-Charge.

FRANKFORT, KAN.—Bids are asked until March 17 by the city for furnishing material and constructing a water-works plant here.

ALBA, MO.—The city has voted $12,000 of bonds for the construction of water-works.

JEFFERSON BARRACKS (St. Louis post-office), MO.—Bids are asked until 11 a. m., March 14, by Capt. O. W. Bell, Q. M., U. S. A., for the construction of a water-works system.

NORMAN, OKLA.—Bids are asked until 8 p. m., March 23, by the city for furnishing and laying several miles of cast iron water mains. M. A. Earl & Co., Muskogee, Okla., are Engrs.-in-Charge. John E. Millar is Mayor.

ENGLEWOOD, COLO.—The contract for constructing a water system has been awarded by the city to SAMSON BROS., 1291 South Broadway, Denver, Colo., at $7,240. Chas. E. Conine is Town Clk. and Secy.

LAS ANIMAS, COLO.—Bids are asked until 10 a. m., March 17, by the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., for the construction of an irrigation reservoir at the naval hospital, New Fort Lyon, Las Animas. E. B. Rogers is Paymaster Gen., U. S. N.

SAN FRANCISCO, CAL.—The plans and specifications prepared by Marsden Manson, City Engr., for the construction of an auxiliary water system for fire protection, were accepted on Feb. 21, by the Board of Public Service.

OAKLAND, CAL.—F. C. Turner, City Engr., was instructed on Feb. 19 by the Board of Public Works to prepare plans for the construction of a pumping plant at Harrison and 20th Sts., for the purpose of flushing the main lake sewer by water from Lake Merritt.

ESCALON, CAL.—The canal system known as the Stanislaus and San Joaquin Water Co., which comprises all the section tributary to Knight's Ferry, Escalon, Ripon, Manteca, Tracy and Lathrop, has been sold to Los Angeles capitalists, among whom is A. C. Balch, Vice-Pres., of Huntington's Pacific Electric Co., and also of the San Joaquin Light and Power Co., Fresno, W. G. Kerchoff and others.

The canal system will be enlarged, and engineers of the new company will go to work next month widening and deepening the laterals and feed canals. Land aggregating 200,000 acres will be irrigated by the system when the work which the new syndicate has planned has been carried out.

*WINNIPEG, MAN.—Bids are asked by the Chairman, Board of Control, until noon, March 24, for supplying a turbine pump of 2,500,000 Imperial gallons capacity with electric motor. H. Peterson is Secy. Bd.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

WEST HARTFORD, CONN.—A. B. Alderson, Consulting Engr., is preparing plans for the construction of the Park St. sewer system, estimated to cost about $30,000. The system will extend through several streets and will have its outlet at the corner of Capitol Ave. and Prospect Ave. The sewers will consist of vitrified pipe 8 to 15 ins. in diameter. Bids will be asked for in about a month, as soon as the plans are perfected.

BUFFALO, N. Y.—The METROPOLITAN CONSTRUCTION CO. was awarded the contract on Feb. 26 by the Sewerage Commission for constructing the extension of the Pratt St. sewer to Sharp St., at $150,895. Francis G. Ward is Comr. Pub. Wks.

ROCHESTER, N. Y.—The contract for the construction of the sewer in Bay St. was awarded on Feb. 21, by the Board of Contract and Supply, to HOOKER & SON, 915 Wilder Bldg., Rochester, at $5,273. Edwin A. Fisher is City Engr.

EAST McKEESPORT, PA.—Bids are asked until 4 p. m., March 7, by the Sewer Committee, for plans and specifications for a sanitary sewer system. E. G. King is Chn. Com.

NEW CASTLE, PA.—PATRICK JOYCE, Youngstown, Ohio, has been awarded the contract for the construction of the Fifth Ward sewer, at $14,206. The Engineer's estimate was $14,690.

BEAVER, PA.—The citizens have voted to increase the bonded indebtedness by $50,000 in order to construct the proposed sewer system. Plans will be prepared at once by an engineer to be selected by the Council, and the work will be started as early in the summer as possible.

FRANKLIN, PA.—Dr. S. G. Dixon, State Comr. of Health, Harrisburg, Pa., has notified the Mayor that after Jan. 15, 1910, no sewage shall be emptied into the local streams, and that the construction of a sewage disposal plant must be begun before that time. Plans will be prepared at once, and work probably started this summer. The plant will cost approximately $100,000. Franklin has 15 miles of sewers.

BALTIMORE, MD.—We are officially advised that the following bids were received on Feb. 19 by the Sewerage Commission for constructing Section 3 of the west low-level interceptor, the work including 1,861 lin. ft. 66-in., 355 lin. ft. 60-in., 80 lin. ft. 30-in. sewer and two belimouths: METROPOLITAN CONTRACTING CO., 95 Milk St., Boston, Mass., $150,895 (awarded contract); Donovon & Phillips, Boston, Mass., $168,564; Warren F. Brenizer Co., Baltimore, Md., $212,128; McLean Contracting Co., Maryland Trust Bldg., Baltimore, Md., $226,906. Harry W. Rogers is Secy. Comn. Itemized bids will be given under Contract Prices.

WASHINGTON, D. C.—Bids were received as follows on Feb. 25, at the office of the Commissioners of the District of Columbia, for furnishing the terra-cotta sewer pipe needed during the next fiscal year: (a) 21-in. pipe; (b) 18-in. pipe; (c) 12-in. pipe: American Sewer Pipe Co., Bessemer Bldg., Pittsburg, Pa., (a) 64.25 cts., (b) 44 cts., (c) 26 cts.; National Fireproofing Co., Colorado Bldg., Washington, (a) 70 cts., (b) 47.6 cts., (c) 28 cts.; Lamond Bros., Lamond, D. C., (c) 25 cts.; A. McB. Porter, Pittsburg, Pa., (a) 63 cts., (b) 42.5 cts., (c) 25 cts.; Patton Clay Mfg. Co., Patton, Pa., (a) 67.5 cts., (b) 45.9 cts., (c) 27 cts.; William Wirt Clarke & Son, Monument and Forrest Sts., Baltimore, Md., (a) 62.5 cts., (b) 42.5 cts., (c) 25 cts.

Bids are asked until noon, March 9, by the Commissioners of the District of Columbia for the construction of pipe sewers.

WASHINGTON, D. C.—Bids were received as follows on March 2 at the office of the Commissioners of the District of Columbia, for the construction of a sewer in the valley of the Soapstone River and Broad Branches between Rock Creek and 30th Sts., Washington: (a) E. G. Gummel, 300 Rhode Island Ave., Washington; (b) Warren F. Brenizer Co., Howard Ave., Anacostia, D. C.; (c) R. J. Beall Construction Co., 1219 F St., N. W., Washington: Ordinary excavation, (a) 70 cts., (b) 65 cts., (c) 89 cts.; sewer brick masonry, (a) $14, (b) $16, (c) $19; rock excavation, (a) $4, (b) $3.50, (c) $4; 21-in. diameter pipe, (a) 93 cts., (b) $1.19, (c) $1.26; 18-in. diameter pipe, (a) 85 cts., (b) $1.06, (c) $1.18. Totals, (a) $7,018, (b) $7,544, (c) $8,875.

TAKOMA PARK, D. C.—The following bids were received on Feb. 24 by the Constructing Quartermaster for the construction of a sewer system at the Walter Reed General Hospital: S. Faith & Co., Philadelphia, Pa., $9,200; Dunigan Plumbing Co., Washington, D. C., $12,410; Martin McNamara, Washington, D. C., $10,500; Warren F. Brenizer Co., Washington, D. C., $7,750; McCay Engineering Co., Baltimore, Md., $8,940; Cranford Paving Co., Washington, D. C., $9,750; Urban & Bradley, Richmond, Va., $10,301; G. S. W. Brubaker, Philadelphia, Pa., $8,750; Minor Engineering Co., Washington, D. C., $11,400; Titt Construction Co., Pittsburg, Pa., $8,000; Newport Heating & Plumbing Co., Newport News, Va., $8,236; F. J. Boas, Philadelphia, Pa., $7,477; E. G. Gummell, Washington, D. C., $10,857.

NORFOLK, VA.—The contract for laying the laterals for the construction of the Seventh Ward sewer system was awarded on Feb. 21 by the Seventh Ward Local Board, to GUILD & CO., Chattanooga, Tenn., at about $34,000.

EATON, OHIO.—The contract for the construction of sewers in 21 miles of streets was awarded on Feb. 21 by the City Council to E. H. HUFFMAN, Dayton, Ohio, at $101,202. Other bidders were: Paul & Kershner, Dayton, Ohio, $109,282; J. W. Buck, Toledo, Ohio, $111,894; Juill & Poos, Cincinnati, Ohio, $114,855; Charles S. Sullivan, Dayton, Ohio, $106,202; Hinker & Williams, Springfield, Ohio, $115,145; N. J. Townsend & Co., Cleveland, Ohio, $109,637; Pease & Buzatt, Indianapolis, Ind., $102,762; Hamer & Swerling, Springfield, Ohio, $108,296; McCarty Bros., Cincinnati, Ohio, $123,663; T. J. Backus & Co., Dayton, Ohio, $122,561; Reese & Larkin, Dayton, Ohio, $110,216; John B. McLean, Cincinnati, Ohio, $104,955; H. C. Gass, Bellville, Ill., $107,533; Municipal Construction Co., $115,271; A. E. Southart and E. C. Shocraft, Adrian, Mich., $120,622; B. F. Sweden & Son, Camden, Ohio, $107,921; C. F. McKracken & Co., Charleston, W. Va., $105,745; Hut & Wingley, $123,654; W. E. Purcell, Lorain, Ohio, $125,243. A. L. Reid is City Engr.

PIQUA, OHIO.—The following bids were opened on Feb. 20 by the Board of Public Service for the construction of the sewer in Camp and Caldwell Sts.: Hecker & Kirchner, Dayton, Ohio, $4,840; J. M. & A. G. Myers, Dayton, Ohio, $4,614; Martin & Shannon, Piqua, $4,118; Hennessey Bros., Piqua, $5,073; Charles A. Sullivan, Dayton, Ohio, $4,883. The bid of Martin & Shannon was recommended for award.

PORT CLINTON, OHIO.—Bids are asked until April 2 by Charles E. De Witt, Consulting Engr., for the construction of sewers at Put-in-Bay, Ohio.

CLEVELAND, OHIO.—Bids are asked until noon, March 12, by the Board of Public Service for the construction of sewers in various streets. A. R. Callow is Secy. Bd.

MARION, OHIO.—Bids are asked until noon, March 10, by the Board of Public Service for the construction of a sanitary sewer, cellar drains and a 3½-ft. concrete, brick or storm water sewer. Charles M. Tobin is Clk. Bd.

SALEM, OHIO.—The city has purchased a tract of 23 acres of land about two miles northwest of this city upon which will be erected during the coming summer a modern sewage disposal plant in accordance with the plans that were prepared a year ago by B. Morris French, City Engr. It has also been decided to utilize a portion of the tract for a garbage disposal plant, plans for which will be prepared this spring by the City Engineer.

PRINCETON, IND.—The City Council has purchased a site upon which to construct a septic tank, and bids will soon be asked for the construction of a sewerage system.

INDIANAPOLIS, IND.—Plans and specifications are being prepared for the construction of a sewer three miles long, beginning in Morris and Division Sts., West Indianapolis; also for sewer in Churchman Ave., and a sewer in Sugar Grove Ave. The Board of Public Works will ask for bids as soon as plans are completed. Blaine H. Miller is City Engr.

NORMAL CITY (Muncie post-office), IND.—The Town Board will soon ask for bids for the construction of a sewer system. Estimated cost, $35,000.

EVANSVILLE, IND.—Bids are asked by the Board of Public Works until 2 p. m., March 7, for the construction of the main sewer in Second Ave. W. F. Wunderlick is Clk. Bd.

BRAZIL, IND.—Bids will probably be asked in April for the construction of Pogue's Run trunk, storm and sanitary sewer. Estimated cost, about $30,000. George A. Fletcher is City Engr.

PEORIA, ILL.—Bids will probably be asked in about one month for the construction of the North Peoria sewer, east section, to be of brick and tile. Estimated cost, about $235,000. D. H. Roberts is City Engr. E. A. Furry is Comr. Pub. Wks.

MOLINE, ILL.—Clark G. Anderson, City Engr., has estimated the cost of the construction of the Sixth Ward sewer district at about $50,000.

CLINTON, IOWA.—Bids are asked until March 10 by the city for the construction of 12.6 miles 8 to 48-in. sewer. Charles P. Chase is City Engr.

MINNEAPOLIS, MINN.—Contracts were awarded on Feb. 28 by the City Council as follows: For 200 tons special castings, STANDARD FOUNDRY CO., Minneapolis, at $35 per ton; for 1,000,000 sewer brick, WISCONSIN RED DRESSED BRICK CO., Minneapolis, at $9.25 per M.; for 1,000,000 sewer brick, MINNEAPOLIS BRICK & TILE CO., Minneapolis, at $7.90 per M.; for furnishing 5,000 bbls. Portland cement, NORTHWESTERN STATES PORTLAND CEMENT CO., Mason City, Iowa, at $1.12 per bbl.; for 6-in. vitrified clay pipe, RED WING SEWER PIPE CO., Red Wing, Minn., at 10½ cts. per lin. ft.; for 24-in. vitrified clay pipe, same firm, at $1.25 per lin. ft. Ellis R. Dutton is Asst. City Engr.

WELLINGTON, KAN.—Bids are asked until March 23 by the city for the construction of about 3¼ miles of 6, 8, 10 and 12-in. sewers. H. A. Rowland, McPherson, Kan., is Engr.-in-Charge.

HOLDREGE, NEB.—Bids are asked until April 3 by the city for furnishing material and constructing complete a sanitary sewer system. M. A. Earl & Co., Muskogee, Okla., are Engrs.-in-Charge.

LINCOLN, NEB.—The contract for constructing sewers in Sewer District No. 39 has been awarded by the city to H. C. GARDNER, Lincoln. Thomas H. Pratt is City Clk.

GALVESTON, TEX.—TRUEHEART & JACKSON are the lowest bidders, at $13,605.61, for the extension of the 33d St. sewer and laterals. A. T. Dickey is City Engr.

NORMAN, OKLA.—Bids are asked until 8 p. m., March 23, by the city for the construction of a sanitary sewer system, complete. M. A. Earl & Co., Muskogee, Okla., are Engrs.-in-Charge. John E. Millar is Mayor.

ALVA, OKLA.—We are officially advised that plans and specifications are being prepared by Burns & McDonnell, Kansas City, Mo., for the construction of a sewer system here.

WALLA WALLA, WASH.—Specifications for the construction of 3,000 ft. new sewer, to be laid in Watertown Addition, are being prepared by J. B. Wilson, City Engr.

BREWSTER, WASH.—The Okanogan Power & Irrigation Co. is making preparations to construct a branch canal, connecting with the main ditch two miles above here, and extending from there to the lower end of the Brewster flats, where it will furnish water for several hundred acres of valuable fruit land. The capacity of the reservoir at Whitestone Lake will be increased by heightening the dam at the foot of the lake, which will furnish an ample supply of water during the dryest seasons.

GARBAGE DISPOSAL.

(* *denotes that this work is advertised in Engineering News.*)

ROCKVILLE, CONN.—Bids are asked by the Public Works Commission until March 7, for street sprinkling from April 1 to Nov. 1.

BIRMINGHAM, ALA.—The County Board of Revenue has awarded the contract for furnishing a 10-ton steam road roller to the MOORE & HANDLEY HARDWARE CO. at $2,850. Bids were opened on Feb. 15.

*COLUMBUS, OHIO.—Specifications are on file at the office of Engineering News, New York, for the construction of a garbage reduction works. Bids are asked until noon, May 11. John H. Gregory is Engr.-in-Charge, Columbus, Ohio.

VINCENNES, IND.—The Star Tankage and Fertilizer Co. will soon ask for bids for the construction of a garbage plant, tanks, etc., on the site of the plant recently destroyed by fire. Estimated cost, $35,000.

STREETS AND ROADS.

(* *denotes that this work is advertised in Engineering News.*)

BROOKLYN, N. Y.—Bids are asked until 11 a. m., March 18, by Bird S. Coler, Boro. Pres., for furnishing and delivering 810 cu. yds. broken trap rock; 270 cu. yds. trap rock screenings; laying cement sidewalks on various streets, and fencing various vacant lots.

BROOKLYN, N. Y.—All bids for repaving Fulton St. with Medina sandstone pavement, from Borough Hall to Hanover Place, were rejected on Feb. 26 by Bird S. Coler, Boro. Pres., as excessive. The bidders were: Biancca & Vincelli Co., $4.95 per sq. yd.; Douglass-Hann Construction Co., $5.83; Charles Cranford, $5.93. Bids for regulating, grading and asphalting 57th St., from Sixth to Seventh Ave., were also rejected.

FORT ONTARIO (Oswego post-office), N. Y.—Bids are asked until March 12 for 200 ft. macadam road and gutters.

ROCHESTER, N. Y.—The Board of Contract and Supply awarded the contract on Feb. 21 for macadamizing Atkinson St., to F. C. LAUER & SON, at $14,612. Edwin A. Fisher is City Engr.

*WATERTOWN, N. Y.—We are officially advised that the following bids were received on Feb. 21 by the Board Public Service for paving Leroy and Main Sts. with either Medina block pavement on concrete base or vitrified paving block or brick on concrete base: Mulderry Bros., Albany, N. Y., Medina block, $3.79 per sq. yd., and $4.12 if paving is laid between car rails; Metropolitan brick, $2.50; Johnsonburg, $2.44; Mack, $2.45; New York Brick & Paving Co., $2.44; Clearfield, $2.45; Kushequa, $2.45, or $2.67 if paved between the rails for above-mentioned brick; Medina curbing, 99 cts. per lin. ft. Hagerman, Miller & Hagerman, Rochester, N. Y., Medina block, $3.95, including paving between rails, $4.50; Syracuse brick, $2.45; Johnsonburg, $2.55; Mack, $2.50, including paving between rails; Johnsonburg, $3.25; Syracuse, $3.20; Medina curb, $1.20. W. J. Semper, Brownville, N. Y., Medina block, $4.04; paving between rails, $4.37; Johnsonburg, $2.57; Mack, $2.43; New York Brick & Paving Co., $2.43; paving between rails, $2.87 for Mack and New York brick, and $3.01 for Johnsonburg; Medina curb, $1.08. Dollard & Haller, Albany, N. Y., Medina block, $4.09; paving between rails, $4.49; Clearfield brick, $2.80; paving between the rails, $3.20; Medina curb, $1.25. C. O. McComb, Syracuse, N. Y., Medina block, $4.80; inside the rails, $5.30; Mack brick, $2.43; Corning, $2.51; New York brick, standard, $2.37; New York special, $2.54; paving between rails, $2.49; Medina curb, 90 cts. H. E. Baker is City Engr.

SYRACUSE, N. Y.—The Common Council has adopted ordinances providing for grading Oak St., Kyle Ave., Comstock Place, Loomis Ave., Ostrander Ave. and Cannon St; and paving Temple St., from South Salina St. to Onondaga Creek, with asphalt or brick pavement. Henry C. Allen is City Engr.

BUFFALO, N. Y.—Separate bids are asked until March 11 by the Department Public Works for paving portions of Zittle St. and Hoffman Alley, repaving Rhode Island St. and Glenwood Ave., and macadamizing Saybrook Place. Francis G. Ward is Comr. Pub. Wks.

PASSAIC, N. J.—Bids are asked by the Road Committee of the Board of Chosen Freeholders of Passaic County, at office of George W. Botbyl, Clk., until 2 p. m., March 11, for grading and macadamizing the Midvale road.

*ASBURY PARK, N. J.—The date for receiving bids for about 25,000 sq. yds. paving has been extended from Feb. 24 to March 9. W. C. Burroughs is City Clk.

*SOMERVILLE, N. J.—Bids are asked by the Board of Chosen Freeholders, Somerset County, at the Court House, Somerville, until 11 a. m., March 24, for grading and macadamizing Road No. 1, being a section of New Jersey turnpike in Franklin Township, 2½ miles long; Road No. 2 in Bernards Township, 2 12/100 miles long, and Road No. 3 in North Plainfield Township, 2 33/1000 miles long. Thomas E. Gibson is Dir. State Commissioners of Roads.

IRWIN, PA.—THE PITT CONSTRUCTION CO., Fulton Bldg., Pittsburg, Pa., was awarded contract on Feb. 21 by the Westmoreland County Commissioners for the construction of a state road from Irwin to the Allegheny County line near McKeesport, at $46,000.

DORRANCETON (Wilkes-Barre post-office), PA.—Bids are asked until 7 p. m., March 9, by the Town Council for paving, curbing and grading James St., from Wyoming Ave. to Rutter Ave., with vitrified fire clay paving block on concrete foundation. William A. Aten is Chn. Council.

BALTIMORE, MD.—Bids are asked until 11 a. m., March 14, by Commissioners for Opening Streets, Hoen Bldg., for grading, curbing and paving with macadam Whiteford St., from Old Frederick road to Frederick road.

WASHINGTON, MD.—The following bids were opened on Feb. 7 at the office of the Constructing Quartermaster, U. S. A., for constructing 22,488 sq. yds. macadam roads at Fort Washington. THOMAS H. LYONS, Tippetts, Md., 59¾ cts. per sq. yd. (awarded contract); William H. Virden, Lewes, Del., 65 cts., McDowell & Brown, Baltimore, Md., $1.53.

HUNTINGTON, W. VA.—Bids are asked until noon, March 16 by the Common Council, for grading, curbing and paving with vitrified brick certain streets and alleys, approximately 84,000 sq. yds. paving, 36,000 lin. ft. curbing. John Coon is Chn. Street Com.; A. B. Maupin is City Engr. Advertised last week.

CHARLESTON, W. VA.—PFAFF & SMITH were awarded the contract on Feb. 24 by the Board of Affairs for paving Hansford St. and laying sewers therein, at $5,940. W. A. Hogue is City Engr.

*FORT MORGAN, ALA.—Bids are asked by Capt. Louis P. Garrard, Jr., Constructing Q. M., U. S. A., until 1.30 p. m., March 30, for the construction of vitrified brick roads at this post.

MONTGOMERY, ALA.—The contract for grading and graveling Flowers and Pike roads, bids opened Feb. 17, has been awarded to O. J. PRUETT, at $38,000. J. T. Bullen is County Engr.

*ASHLAND, KY.—Bids are asked until March 23 by the city for 12,500 sq. yds. of vitrified brick or bitulithic pavement, 17,100 sq. yds. vitrified brick pavement, and 19,000 lin. ft. concrete curb and gutter. Joseph W. Bosley is City Engr. Advertised last week.

LOUISVILLE, KY.—Bids are asked until March 18 by the Board Public Works for grading, curbing and paving 15 sidewalks, about 3,000 sq. yds. Estimated cost, $5,000. J. P. Claybrook is Ch. Engr. Dept. Pub. Wks.

We are officially advised that the following bids have been received by the Board Public Works for granite paving blocks per ton of 2,240 lbs., GEORGIA GRANITE CO., Atlanta, Ga., $5.34½ (f. o. b. Louisville), $5.54 (delivered to any part of city); L. R. Figg, Louisville, Ky., $5.39 (f. o. b. Louisville), $5.59 (delivered to any part of city); Henry Bickel Co., Louisville, Ky., $5.47 (f. o. b. Louisville), $5.97 (delivered to any part of city); E. N. High, $5.80; R. J. Tilford, Louisville, Ky., $5.89 (f. o. b. Louisville); Davidson Granite Co., $6.10 (f. o. b. Louisville); J. Gast, Louisville, Ky., $6.28 (f. o. b. Louisville). J. P. Claybrook is Ch. Engr. Pub. Wks.

DELAWARE, OHIO.—Bids are asked until noon, March 9, by the Board Public Service for improving East Winter St. from the Olentangy River bridge to the Cleveland, Cincinnati, Chicago & St. Louis Ry. tracks; North Lake St., from Winter St. to Central Ave.; East Central Ave., from the west line of Lake St. to the tracks of the Cleveland, Cincinnati, Chicago & St. Louis Ry., by grading, underdraining and paving the roadway with vitrified brick.

CINCINNATI, OHIO.—Bids are asked until noon, March 20, by the Board Public Service for a municipal asphalt repair plant. John J. Wenner is Clk. Bd.

BEREA, OHIO.—Bids are asked until noon, March 9, by O. R. Stone, Village Clk., for grading, curbing, draining and paving with brick or brick block, Seminary St. and East Bagley road.

DAYTON, OHIO.—Bids are asked until 10 a. m., March 7, by the Madriver Township Trustees at the office of the County Surveyor, Montgomery County, for cutting, grading, and graveling Burkhardt Ave. on Smithville hill. William Gruenwald is Pres. Trustees.

COLUMBUS, IND.—A petition has been filed for the construction of a gravel road from East Columbus to the Haw Creek bridge; a gravel road from Columbus west to the Two-Mile House, and the improvement of Second street, which connects the two proposed roads. The Commissioners will ask for bids as soon as plans can be prepared.

INDIANAPOLIS, IND.—Preliminary plans for the construction of a boulevard on the north side of Fall Creek from Capitol Ave. to Northwestern Ave. are being prepared. Blaine H. Miller is City Engr.

INDIANAPOLIS, IND.—The Board of Public Works will soon ask for bids for the construction of a brick roadway in first alley west of Illinois St., from 13th to 32d St.; for bitulithic roadway in Lowel Ave., and for cement walks in Michigan St., Shank St. and Gale St.

INDIANAPOLIS, IND.—The Board of Public Works will soon ask for bids for a graded roadway in first alley north of Washington St.; for brick roadway in Pine St. from Washington St. to Market St., and from Market to North Davidson Sts.; for a pipe sewer in first alley north of 26th St., and for opening alley west of Patterson St.

TERRE HAUTE, IND.—Bids are asked until 11 a. m., March 21, by the County Commissioners for grading and graveling road No. 12, Vigo County. Nathan G. Wallace is County Audr.

We are officially advised that HAWKINS BROS., Brazil, Ind., were awarded the contract on Feb. 21 by the County Commissioners for the construction of two miles of 15-ft. macadam road in Honey Creek Township, at $9,778. George Grimes, Terre Haute, is Design. Engr.; Nathan G. Wallace is County Audr.

LAFAYETTE, IND.—The Board of Public Works has ordered plans and specifications for the curbing, guttering and paving of 24th St., from South to Ferry St. John B. Truman, City Engr.

GARY, IND.—Bids are asked until 2 p. m., March 17, by C. O. Holmes, Clerk Trustees, for macadamizing several streets.

*SAGINAW, MICH.—Bids are asked until 4.30 p. m., March 12, by the Board Public Works for paving portions of 21 streets, estimated at 115,000 sq. yds. with the necessary curbing, grading, excavating, and drainage. Bids may be submitted on any one or all of the streets for the various kinds of surface materials admissible, namely: Sheet asphalt on concrete foundation; bitulithic on concrete foundation; brick on concrete foundation; creosoted wood block on concrete foundation; concrete macadam. David C. Bell is Clk. Bd. Advertised last week.

BELLEVILLE, ILL.—The city contemplates having four new streets paved with brick and curbing same at an estimated cost of $150,000. Fred [illegible]chman, Jr., is City Engr.

PEORIA, ILL.—THE CRESCENT CONTRACTING CO. was awarded the contract on Feb. 24 by the Board of Local Improvements for paving First Ave. from Spencer to Seventh Sts., with brick, at $[illegible]0,656.

EDWARDSVILLE, ILL.—The Board of Local Improvements awarded the contract on Feb. 25 for paving South Fillmore St., to JOHN HAMM, Litchfield, Ill., at $11,093.

SPRINGFIELD, ILL.—Ordinances have been passed providing for paving Cook St. from Eleventh St. to East Grand Ave., 11,700 sq. yds., with brick on a 6-in. concrete foundation, with an asphalt fill, and 1,600 lin. ft. sandstone curb. Estimated cost, $26,155; also Capitol Ave., from Eleventh St. to East Grand Ave., 12,000 sq. yds. of brick pavement on a 6-in. concrete foundation, with an asphalt fill, and 6,450 lin. ft. sandstone curb. Estimated cost, $26,656.

MOUNT VERNON, ILL.—The contract for 10,167 sq. yds. brick paving, bids opened Feb. 18, has been awarded to J. T. COLLINS, Venice, Ill., for $10,[illegible].

ANNA, ILL.—Bids will be asked about May 1 by J. L. Hammond, City Clk., for 24,758 sq. yds. of brick paving. C. W. Brown, Jacksonville, Ill., is Engr.

SHEBOYGAN, WIS.—Bids are asked by the Board of Public Works until 4 p. m., March 14, for grading and macadamizing roadway and curbing sidewalks on Niagara Ave., from North Eighth St. to North Third St. John Kummer is Chn. Bd.

LA CROSSE, WIS.—Walter S. Woods, City Engr., is preparing plans for 5,000 sq. yds. of brick paving, on concrete foundation, and 20,000 sq. yds. of macadam paving. Bids will be asked in about two months.

NEENAH, WIS.—Bids are asked until 1.30 p. m., March 16, by the Board Public Works for improving Wisconsin Ave. from the west line of the intersection of Church St. to the right-of-way of the Chicago & Northwestern Railway Co. on Walnut St. to the established grade, by grading the roadway and constructing thereon a vitrified block pavement together with limestone curb from Church St. to Commercial St., and a cement surb from Commercial St. to the right-of-way of the Chicago & Northwestern Railway Co. on Walnut St. About 400,000 paving block will be used. J. P. Keating is Secy. Bd.

CLINTON, IOWA.—Bids are asked until March 10 by the city for 2,600 yds. brick paving on a concrete foundation, and 1,300 ft. combined curb and gutter. Charles P. Chase is City Engr.

DES MOINES, IOWA.—Bids are asked by the Board Public Works until 11 a. m., March 14, for curbing with Portland cement, Carpenter Ave., from 15th St. to 18th St., about 2,058 lin. ft. George D. Dobson is City Engr.

MINNEAPOLIS, MINN.—The contract for furnishing 15,000 bbls. Portland cement was awarded on Feb. 28 by the City Council to the NORTHWESTERN STATES PORTLAND CEMENT CO., Mason City, Iowa, at $1.12 per bbl. Andrew Rinker is City Engr.; Ellis R. Dutton is Asst. City Engr.

MINNEAPOLIS, MINN.—We are officially advised that the following bids were received on Feb. 28 by the City Council for (a) 2,000 cu. yds. crushed granite, (b) 40,000 sq. yds. sandstone blocks, (c) 40,000 sq. yds. brick paving, (d) 2,000 lin. ft. granite curb, straight and radius, (e) 5,000 lin. ft. sandstone curb, straight and radius: Purington Paving Brick Co., Galesburg, Ill., (c) 96.8 cts. per sq. yd.; Consolidated Granite Co., Ortonville, Minn., (a) $2.95 per cu. yd. (d) 75 cts. per lin. ft. for straight, $1 per lin. ft. for radius; Robt. Graham Co., St. Cloud, Minn., (d) 57 cts. per lin. ft. for straight, 67 cts. per lin. ft. for radius; Western Granite Co., St. Cloud, Minn., (a) $2.15 per cu. yd., (d) 70 cts. for straight, 92 cts. for radius; Wisconsin Granite Co., Chicago, Ill., (a) $2.07 per cu. yd.; New Ulm Stone Co., New Ulm, Minn., (a) $2.24 per cu. yd.; Kettle River Quarries Co., Minneapolis, Minn., (b) $1.55 per sq. yd., (e) 54, 56 and 66 cts. for 5 × 18, 5 × 20 and 6 × 20-in. straight, and 64, 66 and 76 cts. for radius; Barber Asphalt Paving Co., Minneapolis, Minn., (b) $1.58 per sq. yd., (e) 52, 54 and 64 cts. for 5 × 18, 5 × 20 and 6 × 20-in. straight curb, and 62, 64, and 74 cts. for radius; Northwestern Granite Co., St. Cloud, Minn., (e) 61 cts. for straight, 71 cts. for radius. Ellis R. Dutton is Asst. City Engr.

CROOKSTON, MINN.—Bids are asked until 8 p. m., March 10, by A. M. Childs, City Clk., for furnishing the material and laying the cement sidewalks, concrete and tile; driveways, street crossings and sidewalk in sections, which may be required by the city during the coming season; also for cement curb and cement curb and gutter (combined).

ST. LOUIS, MO.—Bids are asked until noon, March 17, by the Board Public Improvements for improving and reconstructing various streets and avenues. Estimated cost, $378,000. W. B. Dryden is Secy. Bd.

HOUSTON, TEX.—Bids are asked until noon, March 10, by John B. Ashe, County Audr., for grading the Alameda and Pierce Junction road.

HOUSTON, TEX.—Bids are asked until noon, March 10, by John B. Ashe, County Audr., for grading and paving several roads.

HOBART, OKLA.—Bids are asked by A. W. Kerr, City Clk., until 8 p. m., March 10, for grading, curbing and paving various streets.

DENVER, COLO.—The following bids have been received by the Board Public Works for street improvements: For improving Blake St., by grading and paving—Scerie Bros., 57,712; Colorado Co., $55,621; Denver & Pueblo Construction Co., $54,456; J. Fred. Roberts, $53,711; Gaffey & King, $59,-130. For grading and paving Wazee St.—Scerie Bros., $6,440; J. Fred. Roberts, $7,-040; Colorado Co., $7,120; Gibbons & Hughes, $7,100; Gaffey & King, $7,300; Denver & Pueblo Construction Co., $6,260. John R. Hunter is City Engr.

SEATTLE, WASH.—B. H. Thompson, City Engr., has reported the estimated cost of the following street improvements: North and East 63d St. and other streets, concrete walks, $18,059; Kirkwood Place, and other streets, concrete sidewalks, $24,200; McKinley Place, and other streets, concrete sidewalks, $18,860; Seventh Ave. North, concrete sidewalks, $3,678; Comstock St., grading, $4,600.

SEATTLE, WASH.—See under Light and Power Plants.

SEATTLE, WASH.—The following contracts have been awarded by the Board of Public Works for street improvements: For the improvement of 23d Ave. North and other streets by laying concrete walks, SMITH & HALL, $24,608; HANS PEDERSON, $22,734; MACQUAID & MOORE, $23,242; 24th Ave. and other streets by grading and concrete walks: J. E. BERKHEIMER, $10,606; JOSIAH JONES & SON, $9,577; Fourth Ave. Northeast and other streets by grading, etc.: P. J. McHUGH, $51,446; ANDREW PETERSON & CO., $33,200; Alley in blocks 26 and 27, A. A. Denny's addition, brick paving: RARDIN & KOPTA, $3,751; PAUL STEENSTRUP, $3,536; SPARGER CONCRETE CO., $3,392; F. McLELLAN & CO., $3,247; MACADAM & CO., $3,672; COAST CONCRETE CO., $3,405; Main St., from the alley between First Ave. South and Railroad Ave., brick paving: F McLELLAN, $2,871; COAST CONCRETE CO., $3,341; PAUL STEENSTRUP, $3,236; H. F. JAHN & CO., $3,177; RARDIN & KOPTA, $3,382. R. H. Thomson is City Engr.

SAN FRANCISCO, CAL.—The Public Utilities Committee of the Board of Supervisors has approved the plan to extend Montgomery Ave. to the water front, selecting Commercial St. as the line of the proposed extensions. Marsden Manson, City Engr., was instructed to prepare plans for widening Commercial St. Estimated cost, $2,000,-000.

All bids for repaving Sutter St. between Grant and Van Ness Aves., were rejected on Feb. 4 by the Board of Public Works.

RENO, NEV.—Bids are asked until 4 p. m., March 23, by H. E. Christie, City Clk., for grading and macadamizing District No. 1.

LUCILE, IDAHO.—A wagon road ten miles in length will be constructed from Lucile to the Blue Jacket mine. Frank E. Johnesse is Mgr. Blue Jacket mine, Lucile, Idaho.

TORONTO, ONT.—The following street improvements have been recommended by the City Engineer: Asphalt—Wallace Ave., $20,-164; Broadview Ave., $5,912; Essex St., $7,-685. Bitulithic—Binscarth Road, $9,419. Brick—Howard Park Ave., $14,446; Austin Ave., $4,830.

SKAGWAY, ALASKA.—See under U. S. Possessions."

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

SANFORD, ME.—The Goodall Worsted Co., of Sanford, will increase the height of the addition, now being built, by one story. The building, when completed, will be 134 × 60 ft., four stories high, and will be used for the manufacture of worsted yarns.

LOWELL, MASS.—Plans have been completed for a building which is to be erected for the Merrimack Mfg. Co., Dutton St., Lowell. It is to be a fireproof concrete structure, 100 × 42 ft., and will be used as a waste house. The cost will be about $10,-000. J. C. Wadley is Mgr.

SOMERVILLE, MASS.—Tristram Griffin, 114 State St., Boston, Mass., has plans for a boiler-house and testing room for the Crosby Steam Gage & Valve Co., East Somerville.

WATERBURY, CONN.—Revised plans for a 5-story brick factory for the Waterbury Clock Co., will be ready for figures about March 1. There will be a separate boiler and engine-house. E. E. Benedict, Arch., 51 Leavenworth St., Waterbury, has charge.

BUFFALO, N. Y.—R. G. Wright & Co., 52 Terrace St., iron workers, have purchased a site, 52 × 198 ft., at 121 Swan St., and will erect a 3-story brick factory at once.

ARLINGTON, N. J.—William Gardam & Son, 45 Rose St., New York, N. Y., advise us that they have purchased a site, 200 × 100 ft., upon which they intend to construct a building for the manufacture of drilling machines.

WAMPUM, PA.—The Curtin-Ruggles Co., Engrs., 29 Cortlandt St., New York, N. Y., advises us that it will receive estimates until about April 1 for constructing a plant for the Crescent Portland Cement Co., to adjoin the present plant, which is to be dismantled. The plant will cover about four or five acres, and will cost $700,000. It will have a capacity of 3,000 bbls. a day. R. H. Hughes is Gen. Mgr.

GREENSBURG, PA.—George R. Truxall, Press Bldg., Greensburg, is preparing plans for rebuilding the plant of the Stahl Glass Co., recently burned. Estimated cost, $50,-000.

PHILADELPHIA, PA.—We are advised by Sauer & Hahn, Archs., 1112 Chestnut St., Philadelphia, that the following contracts have been let for constructing a plant for the Standard Hosiery Co., at 1310 North Lawrence St.: Buildings, A. RAYMOND RAFF, 1635 Thompson St.; two 250-HP. simple engines, BALL ENGINE CO., Erie, Pa.; two 250-KW. a. c. generators, CROCKER-WHEELER CO., Ampere, N. J. There will be three buildings, the new being 78 × 147 ft., and the old 40 × 100 ft. They will have four stories and basement, and will be of slow-burning construction. The buildings will cost $100,000; equipment, $75,000.

HAZLETON, PA.—Ballinger & Perrot, Archs. and Engrs., 1200 Chestnut St., Philadelphia, have been commissioned to prepare plans and will shortly invite estimates for an addition to the plant of the Duplan Silk Co. at Hazleton. The building will have an exterior of brick, and will be four stories high, with a basement covering an area measuring 200 × 300 ft. It will be equipped with a saw-tooth roof for the purpose of lighting and will give employment to about 700 hands.

CONNEAUTVILLE, PA.—W. H. Walton, of this city, has formed a company, of which he is the head, and which will be known as the Walton Cement Stone Co. C. H. Smith, also of this town, is Secy. and Treas. The company will equip and operate a modern plant for the manufacture of cement building blocks, artificial stone shapes, etc., and will require complete mixing and molding equipment in the early spring.

PURCELLVILLE, VA.—The Purcellville Foundry Co., Purcellville, intends to rebuild its foundry as soon as weather will permit. The new plant will require little equipment. The company would like to correspond with manufacturers of iron flasks.

PARKERSBURG, W. VA.—The contract for the main building and the roofs of the power and engine-houses of the addition to the plant of the Parkersburg Iron Co. have been awarded to the PHOENIX IRON WORKS CO., German National Bank, Pittsburg. The S. R. SMYTHE CO., House Bldg., Pittsburg, Pa., have been awarded contracts for gas producers and ducts, furnace stacks, etc., and the WESTINGHOUSE ELECTRIC & MFG. CO., Westinghouse Bldg., Pittsburg, Pa., have the contracts for the generators, dynamos and other electrical equipment.

CHARLOTTE, N. C.—R. W. Smith, 407 East Sixth St., will establish a plant for manufacturing wire nails. He has not purchased machinery or supplies.

HIGH POINT, N. C.—Davis, Kirkman & Co. will rebuild their plant, recently destroyed by fire. A building, 60 × 120 ft., will be erected, which will cost, with machinery, $20,000. It will have a daily capacity of 600 chairs.

KINSTON, N. C.—Bids are asked until March 15 for erecting a building, 80 × 200 ft., for the Caswell Cotton Mills, Kinston. R. C. Biberstein, Charlotte, N. C., is Engr.; W. D. Laroque is Secy. Noted on Jan. 23.

OXFORD (Anniston post-office), ALA.—It is reported that the Planters' Mfg. Co. is planning to erect a 160-ft. mill addition to receive the additional machinery; also to install equipment for knitting hammocks.

VINEGAR BEND, ALA.—The Alabama & Mississippi R. R. Co., M. Lankford, Gen. Mgr., will rebuild the repair shop recently burned. The building will be of mill construction, 90 × 100 ft. Cost of building, $2,500; cost of machinery, $5,000. It will be used to repair and build railroad engines and cars. N. Kirby is Engr.-in-Charge.

SHREEVEPORT, LA. — Virginia-Carolina Chemical Co., S. W. Travers, Secy., Richmond, Va., is making arrangements for improvements to plant costing $75,000, consisting mainly of erection of building, 200 × 150 ft., to be equipped as acid chambers, which will increase fertilizer capacity 100%.

NEW ORLEANS, LA.—Metairie Cypress Co., W. C. Kent, Pres., incorporated with $50,000 capital stock to develop and manufacture cypress lumber, will establish a 2-story band sawmill, and will build shingle and lath mills. Cost of buildings and machinery, $35,000.

PULASKI, TENN.—The Pulaski Grain & Milling Co. is arranging to establish a flour mill with capacity of 125 bushels, a 1,200-bushel meal mill and a 20-ton chop plant. J. B. Abernathy is Mgr.; John Hunter, Columbia, Tenn., Miller.

MEMPHIS, TENN.—The American Car & Foundry Co. has announced that it has plans ready for the immediate construction of a wheel foundry at its car plant here, to cost not less than $200,000, and to have a capacity of between 500 and 600 wheels a day. It will furnish employment to 400 molders and other laborers, and when the entire plant is in operation between 1,800 and 2,000 men will be employed. The wheel plant will cover a space 100 × 320 ft., and will be a steel structure and fireproof. E. F. Carry is Gen. Mgr., Lincoln Trust Bldg., St. Louis, Mo.

JOHNSON CITY, TENN.—The South & Western R. R. Co. will begin to erect shops here. Two locations are under consideration. M. J. Caples, Johnson City, is Ch. Engr.; W. F. Steffens is Engr. of Bridges and Bldgs.

LOUISVILLE, KY.—The Nick Warrisie Baking Co. will erect a 2-story brick and reinforced concrete addition to its plant, to cost $12,000. Capacity, 30,000 loaves, daily. Fred Erhart, Norton Bldg., Louisville, is Arch.

CLEVELAND, OHIO.—The General Construction Co., Cleveland, is having plans prepared for a 4-story light manufacturing building.

DAYTON, OHIO.—The Dayton Motor Car Co., A. W. Stoddard, Pres., will have plans prepared for reconstructing 4 to 6-story factory building. Estimated cost, $120,000.

WEST CARROLLTON, OHIO.—The Friend Paper Co. will have plans prepared for building a factory building, to be four to six stories, 120 × 180 ft., of brick and reinforced concrete construction, with stone foundation, skylights, steel and concrete fireproofing, plate glass, hardwood finish, cement and hardwood floors, prepared plaster, composition or gravel roofing, structural iron, gas and electric fixtures, water closets and lavatories. Cost, $75,000. J. H. Friend is Pres.

JASONVILLE, IND.—A company, in which J. B. Zorkman, of Indianapolis, is interested, will ask for bids soon for erecting and equipping a brick plant. Estimated cost, $75,000.

GARY, IND.—The Gary Brewing Co. has been incorporated, capitalized at $400,000. The corporation proposes to construct a brewing plant. Joseph Kraus, T. M. McKee and E. M. Close are Dirs.

SHELBYVILLE, IND.—S. M. Sutherland & Son are preparing to build and equip a piano factory in this city. D. Levinson has charge.

GRAND RAPIDS, MICH. — BENDING, BICKNELL & BRIGHTMAN, 408-9-10 Murray Bldg., Grand Rapids, have secured the contract for equipping the Eclipse Box Co.'s factory, and will be in the market for 220-volt direct-connected motors, galvanizing plant, printing press for wood, multi-color; wood-working machinery and ventilating apparatus.

BATTLE CREEK, MICH.—The Grand Trunk Ry. System, it is stated, intends to expend about $3,000,000 for fireproof repair shops at Battle Creek. T. T. Irving is Reg. Engr., Detroit, Mich.

STURGEON BAY, WIS.—W. H. Simmons, Local Representative of Badger Portland Cement Co., Appleton, Wis., has completed plans and specifications for the proposed $125,000 plant to be erected here.

BERLIN, WIS.—O. C. Irwin, of Berlin, proposes to erect a plant for the manufacture of generators and electric equipment, etc. The main building will be 92 × 140 ft. and the foundry 60 × 90 ft. Probable cost of buildings, $20,000. No power plant will be installed.

SIOUX CITY, IOWA.—A factory will be erected here by N. W. Smeid, of Sheldon, Iowa, for manufacturing corn planters. Cost, $50,000.

RED WING, MINN.—The S. B. Foot Co. has had plans made for a 3-story tannery, 133 × 219 ft. It will be of brick, mill and steel construction, with gravel roof, galvanized-iron cornice and cement floors. Cost, $60,000. The construction will be done by day work.

DULUTH, MINN.—The Duluth "News-Tribune" states that the committee on new construction of the U. S. Steel Corporation has approved the general plans of the proposed steel plant for this city. G. L. Reis is Vice-Pres. and Gen. Mgr. of the Minnesota Steel Co. The plans, as approved, embrace the construction of two blast furnaces, seven open-hearth furnaces, one blooming mill, three finishing mills, one of which is to be a rail mill, 150 to 160 by-product coke ovens and a village of 100 dwellings to begin with. The power for the operation of the steel plant will be electricity. This will all be provided by utilizing gases for generating it. The blooming mill will be operated by steam power.

ST. PAUL, MINN.—Reed & Stem, Archs., Endicott Bldg., St. Paul, are completing plans for a manufacturing plant to be built on University and Wheeler Aves. and Charles and Fairview Sts. for Griggs, Cooper & Co., 228 East Third St. It will be four stories high, of reinforced concrete, fireproof construction. Cost, $500,000.

MINNEAPOLIS, MINN.—The Chicago, Milwaukee & St. Paul Ry. Co. has bought 40 acres of land adjoining Minneapolis city limits, to be used for shops and terminals. The reorganization of the shop system will put the manufacture of locomotives upon the plant in Milwaukee, but all the major repairs and rebuilding of equipment from La-crosse, Wis., to Terry, Mont., will be done in Minneapolis. N. M. Maine is Dis. Master Mechanic, Minneapolis.

FAIRBURY, NEB.—The Fairbury Planing Mill Co., O. G. Collyer, Mgr., has had plans prepared for a 2-story planing mill, 142 × 165 ft. Construction will be of brick and frame, with composition roof, structural iron, water closets and lavatories. Cost, $15,000 to $20,000.

JACKSON, MO.—We are officially advised that John Hague, Refrigerating Engr., 3664 Olive St., St. Louis, Mo., is preparing plans for a 25-ton ice and cold storage plant for Goodwin & Jean, Jackson.

ST. LOUIS, MO.—The Krey Packing Co., 21st St. and Bremen Ave., has purchased a site for a new plant, on which work is to begin soon. The property is on Florissant Ave. between Bremen Ave. and Farrar St., and has a frontage of 140 ft. by a depth of 151 ft. Plans for the new buildings have not been prepared, but they probably will be either four or six stories high and will cover the greater part of the site. Pierre A. Garneau is Secy.

ST. LOUIS, MO.—John Hague, Refrigerating Engr., 3664 Olive St., St. Louis, advises us that he is preparing plans for two 6-ton refrigerating plants for the Pevely Dairy Co., 3391 Park Ave., St. Louis.

CARLISLE, ARK.—The Carlisle Canning Co. has been organized here to erect a canning plant, which will have a capacity of 10,000 cans a day. J. H. Dixon, of Flora, Ill., is interested. Capital stock, $20,000. Dan Lewis, Ernest Ellis and T. L. Snell are interested.

HOT SPRINGS, ARK.—The Gibson & Draughon Commission & Cold Storage Co. will erect building 40 × 60 ft., and will install a cold storage equipment for general commission produce, fish, poultry, game, eggs, butter, etc. Cost of building and machinery about $9,000. W. M. Draughon, Pres., F. L. Stitt, Vice-Pres. John Hague, St. Louis, Mo., is Arch.

HOUSTON, TEX.—The Inventors' Protective Association of the Southwest has secured site 60 × 125 ft. on which to build machine shops, investing about $20,000. Thomas B. Criddle, Waxahachie, Tex., is Pres., and William A. Cathey, of Houston, Secy.

GAINESVILLE, TEX.—J. R. McChesney will erect a bit and spur factory building, 108 × 24 ft. Cost of building and machinery, $10,000.

CLAYTON, TEX.—The Howard-Mixson Lumber Co. is arranging to erect a sawmill to have a daily capacity of 40,000 ft., and to cost $42,000. T. T. Howard, of Newton, Tex., and C. A. Mixson, Kirbyville, Tex., are interested.

OKLAHOMA CITY, OKLA.—It is proposed to establish a cotton mill here, to be capitalized at $1,000,000. Those interested are: J. H. Grant, C. F. Colcord and I. N. Putnam.

PUEBLO, COLO.—The Pueblo Foundry & Machine Co., Pueblo, will erect an addition to its present foundry. The addition will be used for manufacturing steel castings and will cost $75,000.

BIGLAKE, WASH.—E. G. Kay, of Arlington, Wash., and associates have completed arrangements for erecting a brick and tile factory at Biglake. The proposed plant will have a capacity of 200,000 pressed brick a day and will include tile and common brick machines.

CONTACT, NEV.—The Contact Power & Milling Co., Seattle, Wash., will build a concentrator here to treat ore. The mill will be built on the Little Salmon River, and will be run by electricity. The plant will cost $200,000.

DALHOUSIE, N. B.—The St. Maurice Lumber Co., Three Rivers, Que., which recently purchased the property on the Restigouche River, operated by the Dalhousie Lumber Co., Dalhousie, N. B., has decided to expend $150,000 for a new mill.

CAMPBELLFORD, ONT.—The Canadian Steel Rolling Mills Co. will build a branch at Campbellford, Ont., at a cost of about $60,000. The company will manufacture sheet and bar steel.

TORONTO, ONT.—The Sanitol Chemical Laboratory Co., Boyle and Laclede Sts., St. Louis, Mo., will establish a factory at the corner of Bathurst and King Sts., Toronto. The company will manufacture all kinds of toilet preparations. H. C. G. Luytles is Pres.; R. E. Desmond is Secy.-Treas.

MISCELLANEOUS CONTRACTS.

(denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Railways.

DITCH.—Nevada, Iowa.—Bids are asked by H. T. Weeks, County Audr., until March 20, for constructing an open ditch in Story County.

*DREDGING.—New London, Conn.—Bids are asked until noon, April 1, by Maj. Harry Taylor, Corps Engrs., U. S. A., for dredging in Connecticut River, Conn.

TIMBER.—New York, N. Y.—Bids are asked until 3 p. m., March 12, by the Park Dept., Henry Smith, Pres., for furnishing timber for parks in Borough of the Bronx.

*DAM.—Wheeling, W. Va.—Plans and specifications are on file at the office of Engineering News, New York, for constructing 700 ft. of navigation pass for Dam No. 8, Ohio River. Bids are asked until March 27.

*DREDGE MACHINERY. — Cincinnati, Ohio.—Bids are asked until 2 p. m., April 6, by Lieut.-Col. Wm. T. Rossell, Corps Engrs., U. S. A., for furnishing and installing boilers, machinery, etc., on steel dredge.

DITCH.—Greenville, Ohio.—Bids are asked until March 7 by Jas. R. Marker, County Surv., for constructing Whitewater Joint County Ditch No. 572, in Harrison Township. Estimated cost, $6,273.

DOCK.—Two Rivers, Wis.—Bids were asked until Feb. 14 by the Board of Public Works, Wm. Luebke, Chn., for constructing a dock on the north side of West Twin River. No contract was let. This work will be readvertised.

*CEMENT.—Wheeling, W. Va.—Bids are asked until 11 a. m., March 31, by Capt. F. C. Boggs, Corps Engrs., U. S. A., for furnishing and delivering about 6,500 bbls. of American Portland cement at Dam No. 18, Ohio River.

*DITCH.—Brainerd, Minn.—Bids are asked by J. F. Smart, County Audr., until 2 p. m., March 18, for digging Ditch No. 14. Total length, 15 miles. Estimated quantity, 79,000 cu. yds. excavation. Estimated cost, 12½ cts. per cu. yd.

*KEEPER'S DWELLING.—Tompkinsville, N. Y.—Bids are asked at the office of the Light-House Engineer, Tompkinsville, until 1 p. m., March 28, for the erection of a keeper's dwelling at Stonington Breakwater Light-Station, Conn.

*DIKE.—Harrisburg, Pa.—Bids are asked by the Water Supply Commission of Pennsylvania, Thos. J. Lynch, Secy., until noon, March 24, for construction of repairs to a dike along the western bank of the Delaware River, in Falls Township, Bucks County, Pa.

*REPAIRING WHARF.—Boston, Mass.—Bids were received on Feb. 10 by Capt. Ira L. Fredenall, Constr. Q. M., for repairing wharf at Fort Strong, Long Island, Boston Harbor, Mass. Contract was awarded to LAWLER BROS., 16 City Sq., Charlestown, Mass., at $2,365.

BROKEN STONE.—New York, N. Y.—Bids are asked until noon, March 24, by George Cromwell, Pres. Boro. of Richmond, for delivering 2,500 tons of 1½-in. and ¾-in. broken stone in Stone Delivery District No. 1. Also of 1½ and ¾-in. stone to Stone Delivery District No. 2.

DITCH.—Houston, Tex.—Bids are asked by John B. Ashe, County Audr., until noon, March 10, for the deepening of the Gassaway ditch from Buffalo bayou to Texas Western R. R. Bids are also asked at the same time for the completion of the ditch on the Genoa and Webster road.

*RETAINING WALL.—Harrisburg, Pa.—Bids are asked by the Water Supply Commission of Pennsylvania, Thos. J. Lynch, Secy., until noon, March 24, for the construction of a concrete retaining wall and fill along the west bank of the Beaver River, at Bridgewater, Beaver County, Pa.

METAL FURNITURE.—Coshocton, Ohio.—Bids are asked by the County Commissioners until noon, March 23, for the necessary metal furniture to equip the County Clerk's and the Probate Judge's offices. Plans and specifications for same are on file with C. R. Randles, County Audr., Box 276, Coshocton.

ICE-BREAKING STEAMER.—Ottawa, Ont.—Bids are asked until March 9 by F. Gourdeau, Deputy Minister Marine and Fisheries, for the construction of a steel ice-breaking, mail and passenger steamer, to be delivered at Charlottetown, P. E. I., of the following leading dimensions, namely: 250 ft. long, breadth 40 ft., depth molded 27 ft.

JETTIES, ETC.—Falmouth, Mass.—Bids were received by the Board of Harbor and Land Commissioners, Room 131, State House, Boston, on Feb. 7, for building stone jetties and dredging to make a boat harbor at Deacons Pond in Falmouth. Contract has been awarded to JOHN R. BURKE, Wollaston, Quincy, Mass. F. N. Wales is Clerk of Bd.

*HYDROTHERAPEUTIC EQUIPMENT.—Hot Springs, S. Dak.—Bids are asked by W. A. Tucker, Treas., Battle Mountain Sanitarium, N. H. D. V. S., Hot Springs, until noon, March 28, for furnishing materials, labor, etc., for plumbing and other work for installing hydrotherapeutic equipment at Battle Mountain Sanitarium.

DREDGING.—Port Arthur, Tex.—One bid only was received by Maj. J. F. McIndoe, Corps. Engrs., U. S. A., New Orleans, La., on Feb. 21 for dredging about 250,000 cu. yds. at Port Arthur. It was submitted by the Bowers Southern Dredging Co., Galveston, Tex., at 12 cts. a cu. yd., and it has been recommended for acceptance by Major McIndoe.

CEMENT.—Montreal, Que.—Bids are asked by L. K. Jones, Secy., Dept. Railways and Canals, Ottawa, Ont., until 4 p. m., March 10, for the supply of 35,000 bbls. of Portland cement, for use of the Quebec Canals. Specifications and forms of tender can be procured at the office of the Superintending Engineer of the Quebec Canals, No. 2 Place d'Arms Sq., Montreal.

CEMENT.—Washington, D. C.—The Secretary of the Interior has awarded contract to the MARQUETTE CEMENT MFG. CO., 204 Dearborn St., Chicago, Ill., for furnishing 12,000 bbls. of Portland cement for use in the construction of reclamation works in Wyoming, Montana, North Dakota and Nebraska. The contract price is $1.35 per bbl. f. o. b. cars at La Salle, Ill.

DITCH.—Estherville, Iowa.—Bids were received by Roy J. Ridley, Audr., Emmet County, on Feb. 27, for constructing ditch No. 26. There will be 44,000 yds. open ditch and balance tile. MULGREEN-BOYCE CO., Dubuque, Iowa, was awarded contract for open work at 16.35 cts. a yd. The ARMSTRONG CEMENT WORKS, Armstrong, Iowa, contract for tile at $17,140.

*BARGE CANAL.—Albany, N. Y.—Bids are asked by F. C. Stevens, Supt. Public Works, until noon, March 26, for Contract No. 26, Champlain Canal, Section 2: For dredging a channel in the Hudson River between the south end of Contract No. 27, Station 1,245, at Fort Edward, and the north end of Contract No. 1, Station 1,286 + 33. Length, 0.76 mile. Sheets 1 to 6 inclusive.

SHELL.—Washington, D. C.—Bids were received as follows at the office of the Chief of Ordnance, War Department, Washington, for furnishing 300 4.7-in. cast-iron shells: Tredegar Iron Works, Richmond, Va., $4.80, three months; Cowdrey Machine Works, Fitchburg, Mass., $5.75, three months; Richmond Iron Works, Richmond, Va., $5.97, 90 days; Bethlehem Steel Co., South Bethlehem, Pa., $7, six months.

BREAKWATER.—Key West, Fla.—Bids were received as follows at the office of James Knox Taylor Superv. Arch. of the Treasury, Washington, D. C., for the construction of a breakwater wall at the Marine Hospital, Key West, Fla.: Ferguson & West, Fla., $5,094; W. A. Johnson & Bro., Key West, $4,537; Wm. Curry's Sons Co., Key West, $6,956; Edwards Construction Co., Tampa, Fla., $14,904.

*BREAKWATER. DREDGING.—Algoma, Wis.—Bids were received on Feb. 24 by Maj. W. V. Judson, Corps Engrs., U. S. A., Milwaukee, Wis., for building reinforced-concrete caisson breakwater, pile pier, and plank cribs, removing old pier, and dredging, at Algoma Harbor. All bids for this work were rejected as being too high and in excess of the amount available for the work. It has been recommended that the work be done by the United States by hire of labor and use of United States plant.

BOAT WAGONS.—New York, N. Y.—Bids were received as follows by S. I. Kimball, Gen. Supt. U. S. Life-Saving Service, Washington, D. C., on Feb. 13 for the construction of 20 McLellan boat wagons, ten with runners and ten without runners, to be delivered at the storehouse of this service, 379 Washington St., New York: Studebaker Bros. Mfg. Co., South Bend, Ind., $5,775, 90 days; Chas. Abresch Co., Milwaukee, Wis., $7,500, 90 days; Geo. B. Marx, Brooklyn, N. Y., $4,170, June 1, 1908; Leonhard Wagon Mfg. Co., Baltimore, Md., $6,380, five months.

STONE.—Seattle, Wash.—Bids were received on Feb. 20 by Maj. H. M. Chittenden, Corps Engrs., U. S. A., for furnishing 250,000 tons stone for Gray's Harbor, Wash. Bids were as follows: National Stone Co., Tacoma, Wash., $1.88 a ton from quarry at McCormick, Wash. Northern Contract Co., Seattle, Wash., $1.75 a ton for 150,000 tons from Waldron Island or Port Orchard quarries; 90 cts. for 100,000 tons from Hoquiam quarry; $1.55 for 250,000 tons from Waldron Island or Port Orchard quarries. The bid of the Improvement Asphalt & Paving Co., Seattle, is the same as that of the Northwestern Contract Co.

LIGHT-HOUSE FOUNDATION.—Milwaukee, Wis.—Bids were received as follows at the office of the Engineer of the Ninth Light-House District, at Milwaukee, on Feb. 20 for constructing foundation, crib and concrete pier for light-house for White Shoal, Mich., light station: (a) work specified; (b) placing rip-rap per ton additional: EDW. ISILLEN DOCK, DREDGE & CONSTRUCTION CO., Racine, Wis., (a) $86,226 (accepted), (b) $2.10 (accepted); Great Lakes Dredge & Dock Co., Chicago, Ill., (a) $106,800, (b) $2.25; Adolph Green, (a) $111,536, (b) $2.25; William H. Gillen, Milwaukee, Wis., (a) $119,000, (b) $3; General Construction Co., Milwaukee, Wis., (a) $149,574, (b) $23.04.

CHANNEL IMPROVEMENT.—New Westminster, B. C.—A report has been submitted to the Council Improvement Committee by J. Francis Le Baron, Engr., on the scheme to improve the channel of the Fraser River making it permanently navigable for ocean vessels. The report will be laid before the Government at an early date by Mayor Keary, who will go to Ottawa to ask for an appropriation from the Department with which to carry out the project. The estimate of cost is withheld by the committee for the present. Mr. Le Baron estimates that, with the necessary funds furnished at seasonable periods, the work can be completed in three years.

GRAND STAND.—New York, N. Y.—Bids were received as follows on March 2 by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for the general construction of a grand stand to be placed on the athletic field on Crotona Park North, opposite Prospect and Clinton Aves., Crotona Park, Boro. of the Bronx: D. L. DELANEY, 590 Fordham Road, the Bronx, $36,874 (awarded contract); Buckley Realty & Construction Co., 156 Fifth Ave., $41,730; Charles Cochrane, $43,000; O'Connell & Hanna, 471 West 125th St., $41,920; P. Gallagher, 1181 Broadway, $41,750; J. F. Walsh, Jr., 137 Charlton St., $38,697; George Hildebrand, 38 Park Row, $42,928; William Werner, 892 Forest Ave., $47,334; J. M. Knopp, 230 West 19th St., $41,974; James McArthur, 22 Ormond Place, Brooklyn, $45,496; Kelley & Kelly, Inc., 39 West 42d St., $42,428.

ELEVATORS.—New York, N. Y.—Bids were received as follows Feb. 29, at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for one alternating-current electric elevator, complete; two alternating-current electric elevator machines and three alternating-current belted motors, for the navy yard, New York: (1) Installation, Government specifications; (2) bidder's specifications; (3) price each for belted motors. National Electric Elevator Co., 400 West 23d St., New York, (1) $9,600, (2) $8,050, (3) $345; Brodesser Elevator Co., Milwaukee, Wis., (1) $15,500, (2) $13,585, (3) $1,100; Kaestner & Co., 241 South Jefferson St., Chicago, (2) $7,500, (3) $310; William A. Miller Elevator Mfg. Co., Ninth and Victor Sts., St. Louis, (1) $9,367, (2) $8,017, (3) $1,350; Charles W. Hoffman Co., 223 West 28th St., New York, (1) $8,900; Otis Elevator Co., 17 Battery Place, New York, (1) $9,485, (2) $7,465, (3) $365.

LABOR CONDITIONS.—British Columbia.—The same lack of employment for labor which exists generally throughout the country is also evident on Vancouver Island, according to a report made by A. E. Smith, U. S. Consul at Victoria, B. C. "A year ago it was impossible to get men to perform the labor required; enterprises were abandoned, and work suspended. As a consequence, wages reached unprecedented figures. The lumber mills on the island also suffered from lack of labor. Thus the large mills at Chemainus and at Mosquito Harbor found difficulty in fulfilling contracts. With the financial stringency which set in at New York in October a decided change took place. The decline in price and almost entire cessation of demand for lumber has caused the two largest lumber mills on the island, principally owned by Americans, to close down entirely, thus causing many idle men. The half-dozen other mills are running only at half time, as their yards are filled with lumber for which there is no demand. It may be stated that the lumber mill at Mosquito Harbor shipped to New York by direct steamer last year 20,000,000 ft. of lumber and shingles. The copper mines at Mount Sicker are also closed. The city of Victoria has endeavored to assist in giving work to laborers, by making improvements not heretofore contemplated."

FIRE HOSE.—New York, N. Y.—Bids were received on March 3, by Hugh Bonner, Fire Comr., for furnishing (a) 30,000 ft. 3-in. 6-ply, (b) 20,000 ft. 3-in. 5-ply, (c) 30,000 ft. 2½-in. 4-ply rubber fire hose for the Borough of Manhattan; (d) 10,000 ft. 3-in. 6-ply, (e) 10,000 ft. 2½-in. 4-ply rubber fire hose for the Borough of Brooklyn: B. F. Goodrich Co., 66 Reade St. (a) $52,500, (c) $33,000, (d) $17,500, (e) $11,000; New York Belting & Packing Co., 91 Chambers St., (a) $81,000, (b) $45,000, (c) $45,500, (d) $27,000, (e) $14,500; Diamond Rubber Co., 1876 Broadway, (a) $52,050, (c) $34,050, (d) $17,350, (e) $11,350; Peerless Rubber Mfg. Co., 16 Warren St., (a) $78,000, (b) $46,000, (c) $45,000, (d) $26,000, (e) $15,000; Republic Rubber Co., 47 Warren St., (c) $31,200, (d) $16,450; Manhattan Rubber Mfg. Co., 18 Vesey St., (d) $19,950, (e) $11,400; Voorkes Rubber Mfg. Co., 48 Dey St., (e) $14,500.

The DIAMOND RUBBER CO. secured the award for 10,000 ft. of 2½-in. 4-ply hose for regular service in Brooklyn at a bid of $11,350. The bid of the B. F. Goodrich Co. was only $11,000, but did not conform to the terms and was thrown out. The REPUBLIC RUBBER CO. secured the contract for 10,000 ft. of 3-in. 6-ply high-pressure hose for Brooklyn with a bid of $16,400. The same company secured the 2½-in. 4-ply hose for service in Manhattan at $31,200. The DIAMOND RUBBER CO. secured the contract for 30,000 ft. of 3-in. 6-ply hose for high-pressure service in Manhattan at $52,050.

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

BARGE CANAL.—Albany, N. Y.—The contract for completing the work left uncompleted on Contract No. 17, Barge Canal, has been awarded to ALEXANDER MURDOCK, of Baltimore, Md., at $804,516, by F. C. Stevens, Supt. Public Works, in accordance with bid submitted on Feb. 18, only one bid having been received. This contract was originally held by the Scofield Co., of Philadelphia, Pa., and was cancelled by the State authorities in November, 1907, the company having gone into bankruptcy. It is stated that the bid of Alexander Murdock was made in behalf of the Fidelity & Deposit Co. of Maryland, that company having been surety on the Scofield Co.'s bonds in connection with the contract, and which, under the terms of the bonds, is held liable for the default of the contractor. The original contract was for the construction of the following structures on the Mohawk River: Dam 7, Lock 11, at Amsterdam, Sta. 2201 + 46; Dam 8, Lock 12, at Tribes Hill, Sta. 2443 + 17; and incidental work appertaining thereto. Itemized prices are as follows: (a) Engineer's estimate; (b) Alexander Murdock.

		(a)	(b)
	Clearing	$30.00	$50.00
144,372	Cu. yds. All excavation	.80	.96
150	Lin. ft. Drilling bolt holes in rock	1.00	1.00
55,652	M. Ft. B. M., Sheeting and bracing	40.00	48.00
31,443	Cu. yds., Forming embankment	.15	.12
167.2	Cu. yds. Puddle	2.00	2.40
72	M. Ft. B. M., Yellow Pine or Douglas Fir sawed lumber	50.00	50.00
3	M. Ft. B. M., White Oak sawed lumber	100.00	100.00
327	Foundation piles, 15 ft. long,	6.75	5.50
1,028	Foundation piles, 16 ft. long	7.00	5.75
232	Foundation piles, 20 ft. long	8.00	6.25
75	M. Ft. B. M., Wooden sheet piling	55.00	60.00
127	Sq. ft. Steel Sheet piling	1.00	1.20
48,194.32	Cu. yds. Second-class concrete	7.50	6.88
1,794	Cu. yds. Third-class concrete	6.25	6.50
7,000	Cu. yds. Wash Wall	1.50	1.50
656.7	Cu. yds. Ballast	1.50	1.50
400	Sq. yds. Second-class stone paving	2.00	2.00
3,328.9	Cu. yds. Hand-Laid Rip-rap	2.00	2.75
4,300	Cu. yds. Rip-rap, first class	3.00	2.75
4,470.2	Cu. yds. Rip-rap, second class	3.00	2.75
3,623.2	Cu. yds. Rip-rap, fourth class	2.00	1.75
25,000	Lbs. Iron castings	.035	.037
2,503,598	Lbs. Structural steel	.045	.0375
136,838	Lbs. Metal reinforcement	.04	.048
70	Cast-Iron Idlers "A" (including pins)	4.00	3.40
8	Cast-Iron Idlers "B" (including pins)	1.00	.75
19	Pairs Uprights for Dam 7 (including bracing)	1,000.00	1,200.00
16	Pairs Uprights for Dam 8 (including bracing)	700.00	840.00
19	Gates "A," "Ax" and "Ay" for dams	1,300.00	1,128.00
17	Gates "B" for dams	550.00	420.00
2	Gates "C" for dams	370.00	288.00
4	Gates "D" for dams	260.00	162.00
16	Gates "F," "Fx" and "Fy" for dams	900.00	780.00
14	Gates "G" for dams	390.00	318.00
2	Gates "H" for dams	260.00	204.00
38	Shoes for Uprights for dam 7 (including anchorages therefor)	62.00	53.00
32	Shoes for Uprights for dam 8 (including anchorages therefor)	46.00	40.00
122,000	Lbs. Wrought Iron chains	.66	.672
4	Upper Lock Gates complete with anchorages	3,000.00	2,760.00
4	Lower Lock Gates complete with anchorages	3,900.00	3,480.00
4	Needle dams complete with anchorages and needles	2,800.00	2,280.00
8	Supports for Valve Seats	165.00	148.00
8	Lock valves with seats, tracks and guides	700.00	776.00
3,000	Lin. ft. 2-line wrought iron pipe railing	1.00	1.08
	Total	$836,221	$804,516

INTERCEPTOR.—Baltimore, Md.—Bids were received on Feb. 19 by the Sewerage Commission for constructing west low level interceptor Sec. 3, Contract No. 23. Harry W. Rodgers is Secy. Bids in detail were as follows: (A) METROPOLITAN CONTRACTING CO., Boston, Mass. (awarded contract on Feb. 26); (B) Donovan & Phillips, Boston; (C) Warren F. Brenizer Co., Baltimore; (D) McLean Contracting Co., Baltimore.

*EXCAVATION, ETC.—Nashville, Tenn.—Bids were received on F[illegible] 19 by Maj. Wm. M. Harts, Corps Engrs., [illegible] S. A., for excavation, riprap and pa[illegible] Canal, Riverton, Ala. [illegible] Colbert Shoals in detail were as foll[illegible] last week. Bids yds. excavation; (B) 20[illegible] (A) 350,000 Classes 2 and 3; (C) 2[illegible] yds. riprap, Class 1; (D) 3,000 [illegible] cu. yds. riprap, total: H. C. & J. C. Ho[illegible] paving; (E) Memphis, Tenn., (A) 27[illegible] Hodges & Son, $4. (D) $2, (E) $148,45[illegible] (B) $1.75 (C) ville, Tenn., (A) 23½[illegible] Oliver, Knox. $4.50, (D) $2.50, (E) $[illegible] (D) 95 cts. cu. lande Bros., Birmingha[illegible] Dunn & Lal. (E) $133,000; M. J. Ro[illegible] (A) 38 cts. (A) 26.9 cts. (E) $94,1[illegible] Memphis, Tenn. North Alabama Constr[illegible] A. Shipley & Tenn.-Riverton, Ala. (A [illegible] Co., Memphis (C) $10, (D) $4.50, (E [illegible] cts., (B) $1.25 Leonard, Memphis, Ten[illegible] $.550; Smith & $5, (C) $7, (D) $5, (E) $[illegible] 27½ cts. (B)

U. S. POSSESSIONS AND CUBA.

(denotes that this wo[illegible] advertised in Engineering [illegible])*

DREDGING.—Alaska.—T[illegible] NORTH AMERICAN DREDGING CO., [illegible] San Francisco, Cal., has secured a contr[illegible] to dredge about 177,000 cu. yds. at the t[illegible] of the Yukon River, Alaska. A 15-in. [illegible] dredge will be used and a 7-ft. channe[illegible] be excavated. At present $98,000 has b[illegible] appropriated for a portion of the intended improvements, the total cost of which will be $248,000. The fact that a dredge must be kept on the site, and is idle a greater part of the year, is the cause of the large expense. Capt. G. P. Pillsbury, Corps Engrs., U. S. A., is Engr. at Skagway, Alaska.

LOCOMOTIVE COALING CRANE.—Panama.—Bids were received as follows at the office of the General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., for one locomotive coaling crane, 15-ton

		(A)	(B)	(C)	(D)
1,868	Lin. ft. excavation and refill for 66-in. sewer	$18.00	$30.00	$35.00	$32.00
1,355	" " " " " " 60 " "	39.00	40.00	55.00	75.00
75	" " " " " " 30 " "	9.75	25.00	25.00	13.50
	Excavation and refill for Bellmouth at Light & Pratt Sts	50.00	700.00	500.00	400.00
	" " " " " " " " York sts	200.00	700.00	650.00	492.00
150	Cu. yds. excavation below sub-grade	2.50	2.50	2.50	2.50
150	" " gravel refill below sub-grade	2.25	2.25	2.25	2.25
50	" " rock excavation	5.00	5.00	8.00	1.00
773	" " sewer-brick masonry	16.00	14.00	17.00	18.00
10	" " vitrified-brick masonry	21.00	20.00	23.00	21.00
931	" " Class "A" Concrete masonry	8.50	8.50	9.00	10.00
1,265	" " Class "B" concrete masonry	8.00	8.00	8.50	9.00
500	Lbs. corrugated or twisted steel bars	.04	.05	.08	.04
2	Cu. yds. dimension-stone masonry	35.00	33.00	30.00	25.00
1,900	Lin. ft. 12-in. underdrain	1.00	1.00	1.00	1.25
1,300	Lin. ft. 10-in. underdrain	1.00	1.00	1.00	1.00
200	Lin. ft. 8-in. underdrain	.75	.75	1.00	.90
5	6-in. connections	1.00	1.00	1.00	1.00
10	8-in. "	1.00	1.00	1.00	1.00
5	10-in "	1.00	1.25	1.00	1.25
1	12-in. "	1.00	1.50	1.00	1.50
1	15-in. "	1.50	2.00	1.00	1.75
1	18-in. "	2.50	2.00	1.00	2.00
500	M. ft. B. M. sheeting, shoring & bracing left in place	16.00	16.00	16.00	16.00
10	M. ft. B. M. sheet-piling left in place	25.00	25.00	25.00	25.00
50	M. ft. B. M. lumber in foundation	40.00	50.00	45.00	40.00
6,750	sq. yds. waterproofing	1.35	1.00	1.50	1.00
11	Manhole frames & covers	18.00	15.00	15.00	15.00
178	Manhole steps	.30	.50	.50	.20
10	Wrt-iron shoes for piles	5.00	5.00	5.00	1.00
500	Lin. ft. piles	.30	.50	.75	.10
85	C. I. bases for 6-in. stand-pipes	4.00	3.50	3.00	4.00
2	" " " 8-in. "	5.00	3.50	3.00	4.50
2,100	Lin ft. 6-in. vitrified-pipe house-connections	3.00	1.00	4.00	2.50
50	" " 8-in. " " " "	4.00	1.50	4.00	2.50
400	Lin. ft. 6-in. C. I-pipe house-connections & stand-pipe	4.00	2.00	4.00	3.50
10	Lin. ft 8-in. C. I. pipe house connections and stand-pipe	4.50	3.00	4.00	3.50
2	8-in. drop-connections to manhole, not exceeding 25-ft. drop	21.00	50.00	50.00	75.00
1	10-in. drop-connection to manhole, not exceeding 25-ft drop	25.00	50.00	75.00	100.00
2	8-in. drop-connections to manhole, not exceeding 12-ft. drop	15.00	25.00	40.00	24.00
	Total amount of bid	$150,895	$168,564	$212,198	$226,346
	Number of working days required for completion	300	200	400	400

capacity, maximum radius, 30 ft., minimum radius, 12 ft.: Brown Hoisting Machinery Co., Cleveland, Ohio, $8,465; Browning Engineering Co., Cleveland, O., $6,525, $7,450, $6,725; Industrial Works, Bay City, Mich., $6,535; McMyler Mfg. Co., Cleveland, O., $6,296; Wellman-Seaver-Morgan Co., Cleveland, O., $8,2[illegible]; American Hoist & Derrick Co., St. Paul, Minn., $7,129; Interstate Engineering Co., Bedford, Ohio, $7,495.

RAILWAY RAILS, ETC.—Panama.—Bids are asked at office of H. F. Hodges, Gen. Pur. Officer, Isthmian Canal Commission, Washington, D. C., until March 16 for steel rails, angle bars, track bolts and spikes, etc. (circular No. 426).

DAM, RESERVOIR.—Hawaii.—Bids were received as follows on Feb. 6 by the Public Works Department for the completion of the Nuuanu dam and reservoir: L. M. WHITEHOUSE, $12[illegible]45 (awarded contract); Wilson & Chapin, $1[illegible]4,560; W. H. Hoogs & Co., $129,475; C. [illegible] Holloway, $142,800.

PAVING, SEWERS.—Havana, Cuba.—By the terms of a plan just agreed upon, the work of paving and sewering Havana will begin without delay, according to the New York "Tribune." The plan provides the means for paying for the work, which is to be done by the McGIVNEY-ROKEBY CONSTRUCTION CO. of New Jersey. The project, which meets the approval of all concerned, contemplates setting aside 10 per cent. of the customs revenue collected at Havana and applying the amount to the work. Six years will be required to complete the work, and the 10 per cent. will in that time meet the entire payment, which aggregates $12,000,000. The Cuban government is to be reimbursed to the extent of one-third of the total cost by the city of Havana. The method of payment from the city to the government has not yet been decided on. The contract was made in 1902, but owing to lack of funds the contractors have never prosecuted the work. There already exists a lien on the first 15 per cent. of the customs revenue of Havana to meet the payments on what is known as the Speyer loan.

DYNAMITE.—Panama.—Bids were received as follows Feb. 27, at the office of the Isthmian Canal Commission, Washington, D. C., for a quantity of explosives as follows: (a) 2,350,000 lbs. saltpeter dynamite, 60 per cent. nitroglycerin, cartridges, 1¼-in. diameter by 8 in. long; 30,000 lbs. same, cartridges, 1 in. x 8 in.; 1,775,000 lbs. 45 per cent. nitroglycerin, cartridges 1¼-in. × 8-in.; 175,000 lbs. same, 1 in. × 8 in.; 2,000 lbs. 60 per cent. nitroglycerin dynamite for marine work, 2 in. diameter, 2½ lbs.; all dynamite put up in 10-lb. cartons in 50-lb. wooden boxes; (b) 168,500 electric exploders, 16-ft. to 35-ft., and 390,000 detonators, quintuple strength. E. I. du Pont de Nemours Powder Co., 90 West St., New York, (a) $538,785; 1,110,000 lbs. April 2; 1,112,000 lbs. April 27; 1,000,000 lbs. May 1; 1,110,000 lbs. June 15; (b) $20,674, 60 days. Keystone Powder Mfg. Co., Emporium, Pa., (a) $544,740; commence 45 days; 1,000,000 lbs. per month till completed. Aetna Powder Co., 143 Dearborn St., Chicago, (b) $15,183. Star Electric Fuse Works, Wilkesbarre, Pa., (b) $13,-473.

Contracts have been awarded as follows: E. I. DU PONT DE NEMOURS POWDER CO.—2, 350,000 lbs. saltpeter dynamite, 60 per cent. nitroglycerin, in cartridges, 1¼ × 8 ins., $305,500; 30,000 lbs. same, cartridges, 1 × 8 ins., $3,900; 887,500 lbs. same, 45 per cent. nitroglycerin, cartridges, 1¼ × 8 ins., $104,281.25; 87,500 lbs. same, cartridges, 1 × 8 ins., $10,281. KEYSTONE POWDER CO.—887,500 lbs. saltpeter dynamite, 45 per cent. nitroglycerin, cartridges, 1¼ × 8 ins., $104,281; 87,500 lbs. same, cartridges, 1 × 8 ins., $10,281.

ENGINEERING MATERIAL PRICES.

TRACK FASTENINGS—

Pittsburg, f. o. b. cars—Angle bars, 1.35 to 1.85 cts.; spikes, 1.80 to 2 cts.; bolts, square nuts, 2.65 to 2.75 cts.; bolts, hexagonal nuts, 2.70 to 2.80 cts.

RAILS, STEEL—

New York—at mill—New standard sections, $28; standard, second quality, $27 to $28; light sections, 12 to 14 lbs., $34 to $36; old iron rails, f. o. b. New York, $14 to $15; old steel rails, short lengths, $10 to $11; old steel rails, re-rolling lengths, $11 to $12.

Pittsburg—Standard sections, at mill, $28; standard, second quality, $27 to $28; light rails, 25 to 45-lb., $28; 20-lb., $29; 16-lb., $38; 12-lb., $32; 10-lb., $34, and 8-lb., $38.

STRUCTURAL MATERIALS—

New York—at tidewater—Beams, channels, angles and zees, 1.86 cts.; tees, 1.91 cts. On beams, 18 to 24-in., and angles over 6-in., the extra is 10 cts. Material cut to length is sold from stock at 2¼ cts. to 2½ cts.

Pittsburg—Beams and channels, up to 15-in., 1.70 cts.; over 15-in., 1.80 cts.; angles, 3 × 2 × ¼-in. thick, up to 6 × 6-in., 1.70 cts.; 8 × 8 and 7 × 3½-in., 1.80 cts.; zees, 3-in. and larger, 1.70 cts.; tees, 3-in. and larger, 1.75 cts.; bulb angles and deck beams, 2 cts. Under the steel bar card, angles, channels and tees under 3-in. are 1.70 cts., base, for Bessemer and open hearth, subject to half extras on the standard steel bar card.

PLATES AND SHEETS—

New York—at tidewater—The following prices are based on carload lots, with 5 cts. extra for less than carload lots. Terms, net cash in 30 days:

Tank plates, 6¼ to 14 ins. wide	$1.86 to $1.96
14½ to 100 ins. wide	1.96 to 2.00
Flange and boiler test	1.96 to 2.06
Marine	2.26 to 2.36
Locomotive fire-box	3.15 to 3.20
Still bottoms	2.14½ to 2.29½

Note—Plates more than 100 ins. in width, 5 cts. extra per 100 lbs.; plates 3-16-in. in thickness, $2 extra; Nos. 7 and 8 gage, $3 extra; No. 9, $5 extra.

Pittsburg—tank, ¼-in. thick and heavier, 1.70 to 1.80 cts.; black sheets, 27-gage, 2.50 to 2.55 cts.; black sheets, 28-gage, 2.60 to 2.65 cts.

IRON—

Pig Iron:

At New York—tidewater—

Northern—	
No. 1 X foundry	$18.75 to $19.75
No. 2 X foundry	18.25 to 19.25
No. 2 plain	17.75 to 18.75
Gray forge	17.25 to 18.25
Basic	18.00 to 19.00
Virginia—	
No. 1 foundry	19.00 to 19.50
No. 2 foundry	18.50 to 19.50
Basic	19.00 to 20.00
Southern—	
No. 1 foundry	18.00 to 18.75
No. 2 foundry	17.75 to 18.25
No. 3 foundry	17.25 to 17.75
No. 4 foundry	16.75 to 17.25
No. 1 soft	18.25 to 18.75
No. 2 soft	17.75 to 18.25
Gray forge	17.75 to 17.75
Mottled	16.75 to 17.25
At Pittsburg, f. o. b.—	
No. 2 foundry	17.00 to 19.00
Gray forge	16.00 to 16.50
Bessemer iron	18.00 to 19.00
Ferromanganese	51.50 to 52.50
At Chicago—	
Lake Superior charcoal	21.50 to 22.00
Northern—	
Coke foundry, No. 1	18.00 to 18.50
Coke foundry, No. 2	17.50 to 18.00
Coke foundry, No. 3	17.00 to 17.50
Scotch, No. 1	18.50 to 19.00
Coke, No. 1	17.85 to 18.35
Southern—	
Coke, No. 2	17.35 to 17.85
Coke, No. 3	16.85 to 17.35
Coke, No. 4	16.35 to 16.85
Coke, No. 1 soft	17.85 to 18.35
Coke, No. 2 soft	17.35 to 17.85
Gray forge	15.35 to 15.85
Mottled	15.10 to 15.60
Malleable Bessemer	17.50 to 18.00
Standard Bessemer	19.40 to 19.90
Jackson County—	
and Kentucky Silvery, 6%	20.40 to 20.90
and Kentucky Silvery, 8%	22.40 to 22.90
and Kentucky Silvery, 10%	24.40 to 24.90

Cast-iron Pipe:

New York—Carload lots, net tons, 6-in., at tidewater, $25 to $25.50.

Chicago—4-in. water pipe, $30; 6-in. to 12-in., $29; over 16-in., $28, with $1 extra for gas pipe.

MISCELLANEOUS MATERIALS—

Copper:

Lake, 12.50 to 12.75 cts.; electrolytic, 12.37½ to 12.62½ cts.; casting, 12.25 to 12.50 cts.

Lead: New York, spot, 3.65 to 3.75 cts.

Spelter: New York, spot, 4.70 to 4.75 cts.

Tin: New York, spot, 29.25 to 30 cts.

INDUSTRIAL NOTES.

THE CARBOLINEUM WOOD PRESERVING CO., 349 West Broadway, New York, reports that the Baltimore & Ohio R. R. Co. has specified "Avenarius Carbolineum" for its new Locust Point Pier No. 8, at Baltimore. This pier, when completed, will be the largest immigration pier in the world.

LOUIS J. BERGDOLL AND GEORGE F. PAWLING, formerly Contracting Engineer for Belmont Iron Works, announce that they have formed a partnership to do engineering and contracting work in structural steel and iron under the firm name of Bergdoll & Pawling, Registered, at Broad and Wood Sts., Philadelphia, Pa.

THE CAYUGA LAKE CEMENT CO., Ithaca, N. Y., has increased its capital stock $300,000 and has plans nearly completed for increasing the capacity of the works to 2,500 barrels per day. Arrangements have been made for a steam canal boat with consorts to operate on the Erie Canal between the works and Buffalo and all points on the Erie Canal to New York, which will give water transportation to all points on the Great Lakes and the seaboard.

RECENT CONTRACTS secured by the General Fireproofing Co., of Youngstown, Ohio, include the reinforcement for a new factory of the Chapin & Sacks Ice Cream Co., at Washington, D. C. This building is to be of solid reinforced concrete construction, reinforcing throughout to consist of "Pin Connected Girder Frames" for the beams and girders; "Cold Twisted Lug Bars" and "Expanded Metal" for the columns and floor slabs. The National Fireproofing Co. is the general contractor for the work.

For other Proposal Advertisements see pages 47, 48, 49, 50, 52, of Advertisements and Construction News page 78.

DITCH.

Brainerd, Minn.

Auditor of Crow Wing County, Minn., will let the work of digging Ditch No. 14 Wednesday, March 18, 1908, at 2 o'clock P. M.

Total mileage 15 miles, total excavation 79,000 cu. yds. Estimated cost, 12½ cents per cu. yd.

J. F. SMART,
County Auditor.

SEALED PROPOSALS will be received at the office of the Light-House Engineer, Tompkinsville, N. Y., until 1 o'clock P. M., March 28, 1908, and then opened, for the erection of a keeper's dwelling at Stonington Breakwater Light-Station, Conn., in accordance with specifications, copies of which with blank proposals and other information, may be had upon application to the Light-House Engineer, Tompkinsville, N. Y.

ROADS.

Somerville, N. J.

Sealed proposals to grade and macadamize three roads will be received by the Board of Chosen Freeholders of the County of Somerset at the Court House in Somerville, N. J., on the 24th day of March, 1908, until eleven o'clock a. m., and will then and there be publicly opened and read.

Road No. 1. Being a section of the New Jersey Turnpike in Franklin Township, beginning near the south borough line of South Bound Brook and extending towards New Brunswick 2½ miles.

Road No. 2 is in Bernards Township, and begins at a bridge over the Passaic River below Millington, and extends $2^{12}/_{100}$ miles along the road leading westerly to Liberty Corners.

Road No. 3 is in North Plainfield Township and begins at Texiers bridge at Watchung and extends westerly towards Warrenville $2^{20}/_{1000}$ miles.

The plans, specifications, cross sections and profiles relating to the work can be seen and blank bids obtained at the office of the State Commisioner of Roads at the State House, Trenton, N. J., and at the office of Joshua Doughty, Jr., County Engineer, Somerville, N. J.

THOMAS E. GIBSON,
Director.

Somerville, N. J., Feb. 28, 1908.

State of New York,
Office of Superintendent of Public Works,
Albany, February 26, 1908.

NOTICE TO CONTRACTORS.

Sealed proposals will be received by the undersigned at his office in the Capitol in Albany, N. Y., until twelve o'clock noon of Thursday, March 26, 1908, at which place and hour they will be publicly opened and read, for improving the New York State canals, pursuant to the provisions of chapter 147 of the Laws of 1903, and of the amendments thereto, as follows.

CONTRACT NO. 26.

Champlain Canal—Section 2.

For dredging a channel in the Hudson River between the south end of Contract No. 27, Station 1245, at Fort Edward, and the north end of Contract No. 1, Station 1286 + 33. Length, 0.76 mile. Sheets 1 to 6 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works, at Albany, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division, at Rochester, N. Y.; and at the canal office, Spaulding's Exchange, Buffalo, N. Y. Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90%) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or State bank in good credit within the State and payable at sight to the Superintendent of Public Works for five per centum (5%) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal. Upon execution of the contract and approval of bonds, the deposit will be returned to the proposer. The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made. The amount of bond required for faithful performance will be twenty-five per centum (25%) of the amount of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10%) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

F. C. STEVENS,
Superintendent of Public Works.

TURBINE PUMP.

Winnipeg, Man.

Sealed tenders addressed to the Chairman of the Board of Control for supply of turbine pump of 2,500,000 Imperial Gallons capacity with electric motor for City Water-Works will be received at the office of the undersigned up to 12 o'clock noon on Tuesday, March 24, 1908. Specifications and form of tender may be obtained at the office of H. N. Ruttan, City Engineer, Winnipeg. Each tender must be accompanied by an accepted cheque or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the Contractor to enter into a written contract with approved sureties if called upon to do so. The lowest or any tender not necessarily accepted.

M. PETERSON,
Secretary.

Board of Control Office, Winnipeg, Feb. 24, 1908.

RETAINING WALL AND FILL.

Commonwealth of Pennsylvania,
Office of the Water Supply Commission.

Sealed proposals will be received at the office of the Water Supply Commission of Pennsylvania until 12:00 o'clock noon, on Tuesday, March 24th, 1908, for the construction, in accordance with the provisions of an Act of the General Assembly of the Commonwealth of Pennsylvania, entitled "An Act making an appropriation for the purpose of erecting a protection wall, and filling the washout caused by floods of the Ohio River, and the erection of dam number one and abutment thereto, of the Beaver division of the Pennsylvania Canal, at Bridgewater, Pennsylvania," approved the 13th day of June, A. D. 1907, (P. L. 553) of a concrete retaining wall and fill along the west bank of the Beaver River, at Bridgewater, Beaver County, Pennsylvania; said retaining wall and fill to be constructed in accordance with plans and specifications now on file in the office of the Water Supply Commission of Pennsylvania, Harrisburg, Pa., where they can be examined. All bids must be endorsed: "Proposals for retaining wall and fill along the west bank of the Beaver River, at Bridgewater, Beaver County," and must be accompanied by a preliminary bond in the sum of at least 10% of the cost, which will be returned unless forfeited. The right is reserved to reject any and all bids.

THOMAS J. LYNCH, Secretary,
Water Supply Commission of Pennsylvania.

DIKE.

Commonwealth of Pennsylvania.
Office of the Water Supply Commission.

Sealed proposals will be received at the office of the Water Supply Commission of Pennsylvania until 12:00 o'clock noon, on Tuesday, March 24th, 1908, for the construction, in accordance with the provisions of an Act of the General Assembly of the Commonwealth of Pennsylvania, entitled "An Act to authorize the building of a dike, or dikes, for the protection of property adjacent to the Delaware River, in Falls Township, Bucks County, and making an appropriation therefor," approved the 13th day of June, A. D. 1907, (P. L. 600) of repairs to a dike along the western bank of the Delaware River, in Falls Township, Bucks County, Pennsylvania; said dike to be constructed in accordance with plans and specifications now on file in the office of the Water Supply Commission of Pennsylvania, Harrisburg, Pa., where they can be examined. All bids must be endorsed. "Proposals for dike construction in Falls Township, Bucks County," and must be accompanied by a preliminary bond in the sum

of at least 10% of the cost, which will be returned unless forfeited. The right is reserved to reject any and all bids.

THOMAS J. LYNCH, Secretary,
Water Supply Commission of Pennsylvania.

DEPARTMENT OF PUBLIC WORKS.
Bureau of Water.
Office, 790 City Hall.
Philadelphia, February 26, 1908.

Sealed proposals, endorsed "Bids for (name work bid upon)," and addressed to the undersigned, at the office above mentioned, will be received until 12 o'clock, noon, on March 17, 1908, for

Contract No. 130.—Auxiliary Pumps for Torresdale Filter Plant.
Contract No. 139.—Pump Ends for Queen Lane Pumping Station.
Contract No. 141.—Lardner's Point Pipe Connections.
Contract No. 142.—Track Scales for Torresdale Pumping Station.

Specifications, drawings, and blank forms upon which bids must be made can be obtained from the offices of the Chief of the Bureau of Water, Room 790-A, City Hall, to whom all communications should be addressed.

No bid will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance requiring proposal bonds when the bids exceed in amount five hundred dollars, approved May 25, 1860 (p. 81, West), have been complied with.

The Director reserves to himself the right to reject any or all bids, as he may deem best for the interests of the city.

WM. R. KNIGHT, JR.,
Acting Director.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., February 26, 1908.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 11th day of April, 1908, and then opened for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. Post Office at Bessemer, Alabama, in accordance with drawings and specification, copies of which may be had at the office of the Custodian of Site at Bessemer, Alabama, or at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

TREASURY DEPARTMENT, Office of Supervising Architect, Washington, D. C., March 3, 1908.—Sealed proposals will be received at this office until 3 o'clock p. m., on the 10th day of April, 1908, and then opened, for the construction of an extension to and the remodeling of the U. S. Post-Office and Court-House at Jackson, Mississippi, including plumbing, gas piping, heating apparatus, electric wiring and conduits, in accordance with drawings and specification, copies of which may be had at this office or at the office of the Postmaster at Jackson, Mississippi, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., March 2, 1908.—Sealed proposals will be received at this office until 3 o'clock P. M., on the 9th day of April, 1908, and then opened, for the low pressure steam heating apparatus for the U. S. Post Office and Court House building and extension thereto at Tyler, Texas, in accordance with the drawings and specifications, copies of which may be had at this office, or at the office of the Superintendent of Construction at Tyler, Texas, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

SEALED PROPOSALS will be received at office of W. A. Tucker, Treasurer, Battle Mountain Sanitarium, N. H. D. V. S., Hot Springs, South Dakota until 12 o'clock M., March 28, 1908, and then opened, for furnishing materials, labor, etc., for plumbing and other work for installing Hydrotherapeutic Equipment at Battle Mountain Sanitarium. Drawings may be seen and copies of Instructions and Specifications together with blank proposals and other information may be had upon application to W. A. TUCKER, Treasurer.

OFFICE OF CONSTRUCTING QUARTERMASTER, Fort Morgan, Alabama, March 1st, 1908.—Sealed proposals will be received until 1.30 P. M., March 30th, 1908, for furnishing labor and materials for the construction of vitrified brick roads at Fort Morgan, Alabama. Information furnished on application. Envelopes containing proposals should be endorsed "Proposals for Roads" and addressed to CAPTAIN LOUIS F. GARRARD, JR., Fort Morgan, Alabama.

U. S. ENGINEER OFFICE, Honolulu, T. H., Jan. 31, 1908.—Sealed proposals for construction of breakwater or for stone for breakwater construction at Hilo Harbor, Hawaii, T. H., will be received here until 12 M., March 31, 1908, and then publicly opened. Information furnished on application to Chief Engineer, Pacific Division, 1840 Polk Street, San Francisco, Cal., or this office. C. W. OTWELL, Capt., Engrs.

U. S. ENGINEER OFFICE, New London, Conn., March 2, 1908.—Sealed proposals for dredging in Connecticut River, Conn., will be received here until 12 o'clock, noon, April 1, 1908, and then publicly opened. Information furnished on application. HARRY TAYLOR, Maj., Engrs.

U. S. ENGINEER OFFICE, Cincinnati, O., March 5, 1908.—Sealed proposals for furnishing and installing boilers, machinery, etc., on steel dredge will be received here until 2 P. M., April 6, 1908, and then publicly opened. Information on application. WM. T. ROSSELL, Lt. Col., Engrs.

Situations Wanted

Mechanical and Electrical Engineers.

REPRESENTATIVE for Latin-America or Europe; mechanical and electrical engineer, experienced in different lines; speaks six languages; with highest references; is open for engagement. Address "E. K.," 416 West 58th St., New York. 10-1t

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HYDRO-ELECTRIC CONSTRUCTION—Superintendent or operating manager, technical graduate, nine years' exceptionally broad experience in large hydro-electric plant operation, design and construction; able superintendent, always successful and satisfactory. Open for engagement with responsible parties at fair salary or salary and percentage. Address "P. A. 10," Engineering News, New York. 10-3t

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HAVE 20 YEARS' EXPERIENCE in laying out, making and assembling templates; industrious, sober and hard worker; desires position. F. SCHARF, 4129 Lea Place, St. Louis, Mo. 10-2t

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MECHANICAL AND ELECTRICAL Engineer, age 36, thoroughly familiar with preparing specifications and estimates, supervising engineering and office forces, and all details of office management; now holding executive position of responsibility, desires to make change. Best references. Address "H. B. 10," Engineering News, New York. 10-1t

Civil Engineers.

CIVIL ENGINEER, experienced in general municipal engineering, street and road construction, concrete walks, sewers, drainage, railway location and construction. New York State or West preferred. Address "I. A. 6," Engineering News, New York. 10-2t

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GRADUATE CIVIL ENGINEER, '07, desires position; kind of work and location immaterial. Address "L. 3," Engineering News, New York. 10-5t

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GRADUATE CIVIL ENGINEER (Contractor's Engineer and Superintendent), single, two years' general contracting experience (P. R. R.), one year reinforced concrete buildings, estimating work, and general building contracting. Reinforced concrete building preferred. Will consider foreign offer. Any references required. Address "C. A. 10," Engineering News New York. 10-1t

Surveyors.

INSTRUMENTMAN desires position, three years' experience in railroad work. Understand stadia work; good references; will go anywhere and can report at once. Address ARTHUR LANSBERRY, 207 Reed St., Clearfield, Pa. 10-1t

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INSTRUMENTMAN (23), three years' experience on railroad, municipal and macadam road work, desires position. Good draftsman. Location no object. Address "S. B. 8," Engineering News, New York. 10-1t

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SURVEYING PARTY, owning full equipment and experienced on all kinds of surveys, would like to take contracts for making surveys of any character. Further information from WILLIAM HAVENS, 150 Broadway, New York. 10-1t

Draftsmen.

STRUCTURAL DRAFTSMAN, five years' experience detailing and checking; technical graduate. Address "A. A. 10," Engineering News, New York. 10-1t

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WANTED—By lady, position as draftsman in engineer's office. Salary moderate. Address "B. A. 10," Engineering News, New York. 10-1t

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STRUCTURAL DRAFTSMAN, technical graduate, 5 years' experience detailing bridge and structural work. Open to engagement. Address "D. A. 10," Engineering News, New York. 10-1t

Superintendents, Misc., etc.

TECHNICAL GRADUATE (32), have 6 years' all-around experience in field and office work; desires position with railroad or with consulting engineer; salary moderate. Address "Z. A. 10," Engineering News, New York. 10-1t

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SUPERINTENDENT, completing power house and electric plant for engineering-contracting firm, technical graduate, desires position. Address "O. 3," Engineering News, New York. 10-7t

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YOUNG MAN desires a position as engineer with a construction company doing construction work out of town; has had previous experience in this line of work; also holds a diploma for steam engineering from the International Correspondence Schools; for further particulars write CHARLES L. NILSSON, 520 Park Ave., Hoboken, N. J. 10-1t

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WANTED—Journalistic or literary work in civil engineering. Address "B. 10," Engineering News, New York. 10-2t

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ALL-AROUND MACHINIST and mechanical draftsman; last employed on repairs to machine tools and general machinery in steel plant. 20 years' varied experience; go anywhere; wants a position. Address "P. 10," Engineering News, New York. 10-2t

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A PHYSICIAN with three years' hospital experience wishes a place in a mining, lumber or railroad camp as doctor. Kindly state salary and work expected. Address "R. 10," Engineering News, New York. 10-1t

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GENERAL SUPERINTENDENT structural and ornamental iron works; 12 years' experience; now employed in responsible executive position; would consider responsible executive position with general contractor, architect or structural and ornamental iron works. Address "S. 10," Engineering News, New York. 10-1t

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GRADUATE ENGINEER, Mem. Am. Soc. M. E., age 32, married, 12 years' broad successful experience as engineer of tests, designer, mechanical engineer and superintendent, desires position as assistant or adjunct in mechanical engineering department of recognized college or university. Preferably machine design, drawing or applied mechanics. Experience teaching. Best references. Address "O. 10," Engineering News, New York. 10-2t

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WANTED—Position by college graduate with eleven years' engineering experience on location, construction and maintenance of way. Good references from previous positions. M. of W. work preferred. Address "G. A. 10," Engineering News, New York. 10-1t

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INSPECTOR would be glad to hear from any supervising architect or owner who desires services of an inspector who can get good results and handle work in a businesslike and intelligent manner. Am an engineer, single, temperate, 34 years old. Will go anywhere. Address "D. B. 9," Engineering News, New York. 10-1t

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GRADUATE Civil and Mining Engineer, experienced in railway work and valuation, desires employment. Can refer to all previous employers. Address "F. A. 10," Engineering News, New York. 10-1t

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WANTED—Position as stationary engineer, capable of running all kinds of stationary engines, sober and industrious, middle-aged married man. Address "E. A. 10," Engineering News, New York. 10-5t

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DESIGNER AND COMPUTER, on mill work, machine design and steel railway cars, seeks position of designer or foreman. P. E. L., 359 W. 15th St., N. Y. 10-3t

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PUBLICITY MANAGER, one who has had seven years of excellent experience with large manufacturers of machinery and mechanical goods; one who knows how to write trade literature that escapes the waste basket; understands printing and engraving; prepares advertisements that bring inquiries; a thorough systematist and successful in planning and executing advertising campaigns, working in close harmony with the sales department, wide experience in the use of trade journals and knows the merits of every one in the mechanical field; has finished up large successful special campaign and would like to obtain position with reliable house where good work will be recognized and merit permanent position. Address "O. A. 3," Engineering News, New York. 10-tf

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PRACTICAL ENGINEER, 34 years old, technical education and 12 years' experience on various construction work; concrete in all forms; wants position as field superintendent. Can handle men to advantage; am single and temperate and free to give full time and attention to work in hand. Will go anywhere. Address "C. B. 9," Engineering News, New York. 10-1t

Situations Open

WANTED—A strictly first-class superintendent. A good position is open for a sober, energetic, aggressive man. Only persons of wide experience on heavy earth and rock work and with unusual ability and determination will be able to make good. First letter should give complete details of experience, references, etc. Address F. A. MASELLI, 428 Granite Bldg., Rochester, N. Y. 10-1t

Miscellaneous Wants

WANTED—Will pay $2.00 for 1 copy of Engineering News of June 15, 1874, at that time called the Engineer, Architect & Surveyor; 25c. for copies of Feb. 15, 1900, Nov. 12, 1903, July 20, 1905, and 10c. each for copies of Jan. 2, 30 and Feb. 20, 1908. Cost of mailing allowed in addition. Address A. R. T., care Engineering News, New York. 10-tf

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WANTED—A partner with a few thousand dollars who can take an active part in a construction company; an engineer preferred; good chance for the right man. Address "L. 10," Engineering News, New York. 10-1t

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STRUCTURAL DETAILING. — Contracts taken and finished on short notice. Mechanical ideas worked out and developed. Address JAS. Q. NEWCOMB, C. E., 184 Broadway, Brooklyn. 10-1t

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WANTED

A Second-Hand Smith Concrete Mixer

of ½-yard or one yard capacity, without power preferred. Also a Rock Crusher with screen. Must be cheap. Address "H. 10," Engineering News, New York. 10-2t

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WANTED

Two Second Hand Batch Mixers

about ½-yard cap., with or without power. Address "D. 10," Engineering News, New York. 10-1t

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WANTED — SECOND-HAND RAILS

for about two miles of road, 16 to 20 lbs. per yard, with fishplates, bolts and spikes; also 10 switches and crossings and 15 steel side tipping wagons of about one cubic yard capacity, delivery Aldorf Station, Texas. State lowest price and where can be seen. Must be in good condition.

BALL CARDEN CO.,
10-1t Dallas, Texas.

WANTED

1½ or 1¾ yard Steam Shovel; 3,000 ft. 4, 5 and 6" Wrought Pipe; 1—10 × 14 or 16—36" gage Locomotive; lot ½, ⅝, ¾, 1⅛ and 2" Wire Rope. Give best cash prices.

10-1t LOCK BOX 12, Phillipsburg, N. J.

FOR SALE

FOR SALE.
1—Improved "A" Marion Shovel, 1¾ yd., just out of shops.
1—7 × 10, 36" gage Locomotive, practically new.
12—3-yd. two-way Western Dump Cars.
1—No. 5 Champion Crusher Plant, complete with engine and boiler, worked only four months.
Address ARTHUR L. SHREVE & CO., P. O. BOX 89, BRYN MAWR, PA. 10-1t

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FOR SALE

Steam Road Roller

Standard make. Good condition. New last year. Weight, ten tons. Make me your best offer. Address "W. A. 10," Engineering News, New York. 10-1t

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Reinforcing Bars

WILL CUT LENGTHS TO ORDER.
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Hoisting Machinery Co.

10-1t 21 Park Row, New York.

Patent for Sale

I have recently been granted a very broad patent, for a device which separates steel rods in Reinforced Concrete Construction. This clamp will hold (in beams and girders) each rod in an absolutely rigid position, so that tamping cannot force them out of place, thus distributing the strength of the steel with perfect equality. Device has been used in several buildings with great success. Architects and owners will testify to this. Costs very little to manufacture.

Not being in a position financially to push my invention, would like to make some arrangement on Cash and Royalty basis.

Address "I. 10," Engineering News, New York. 10-2t

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